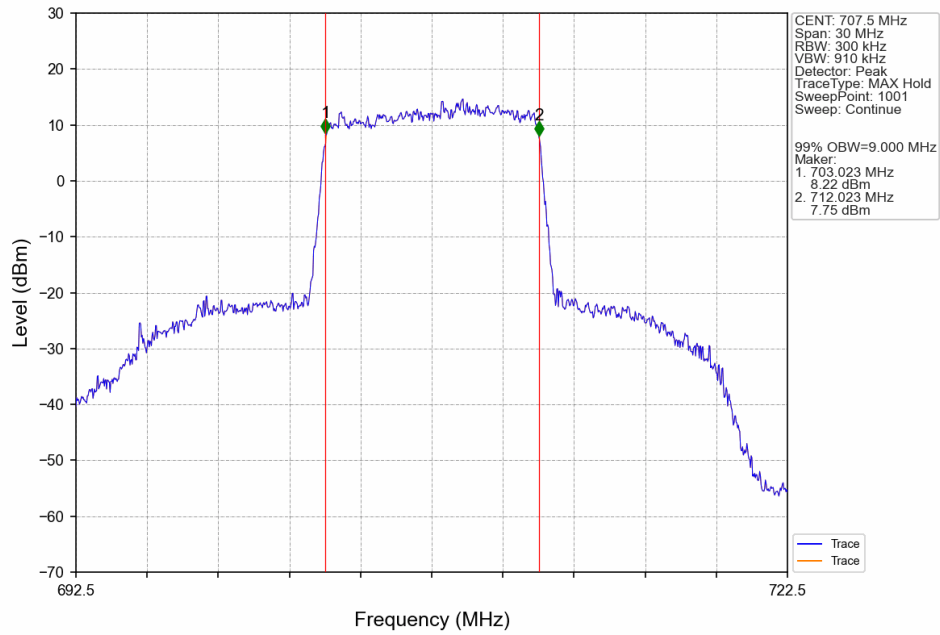
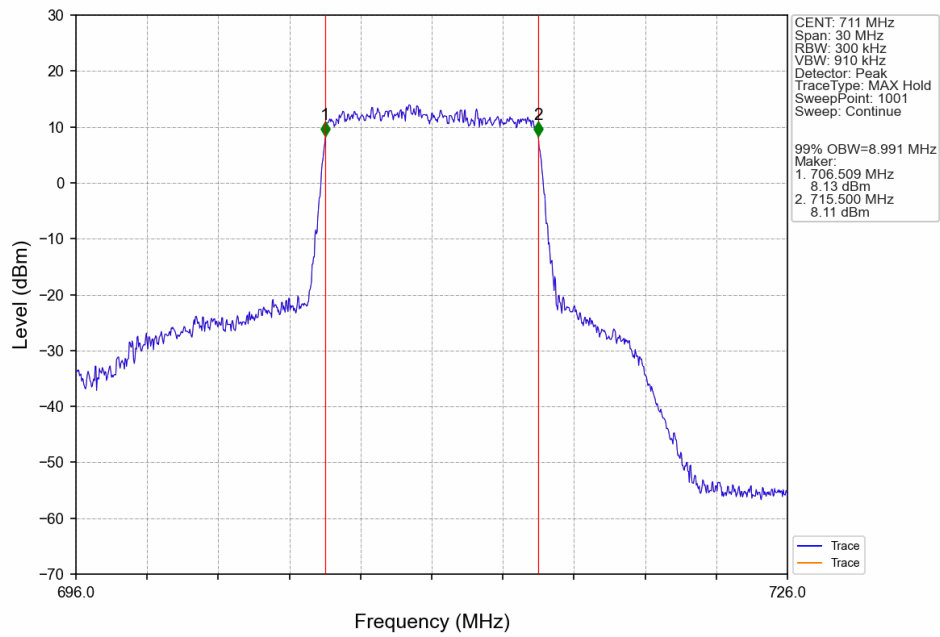


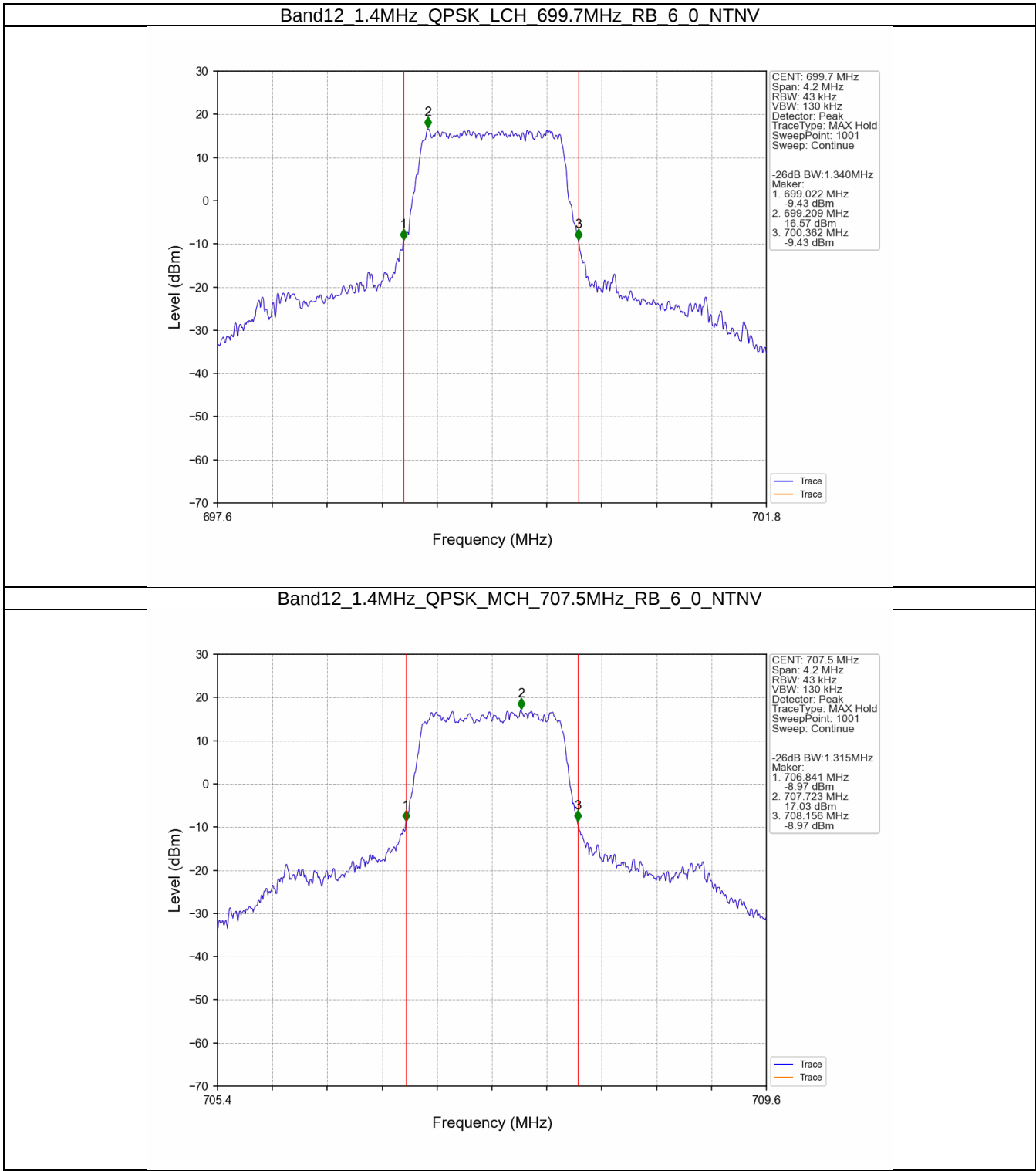
Band12 10MHz 256QAM MCH 707.5MHz RB 50 0 NTNV



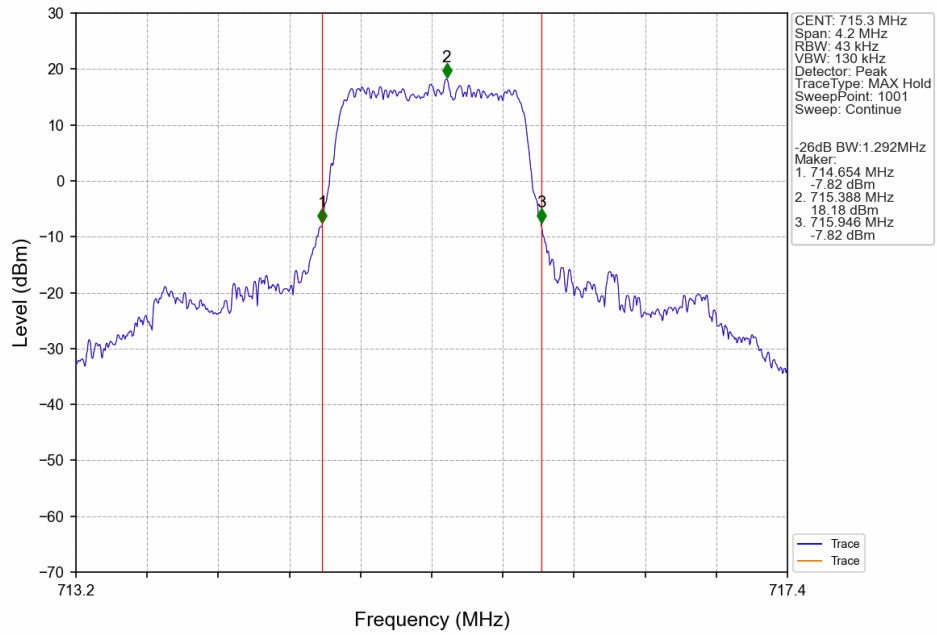
Band12 10MHz 256QAM HCH 711MHz RB 50 0 NTNV



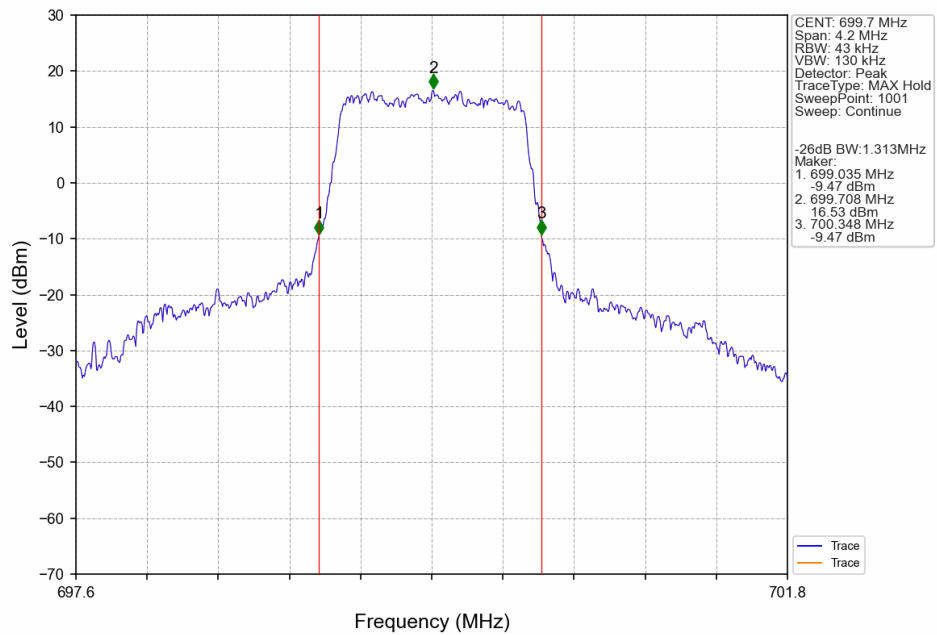
3.2.2 Band12_XDB



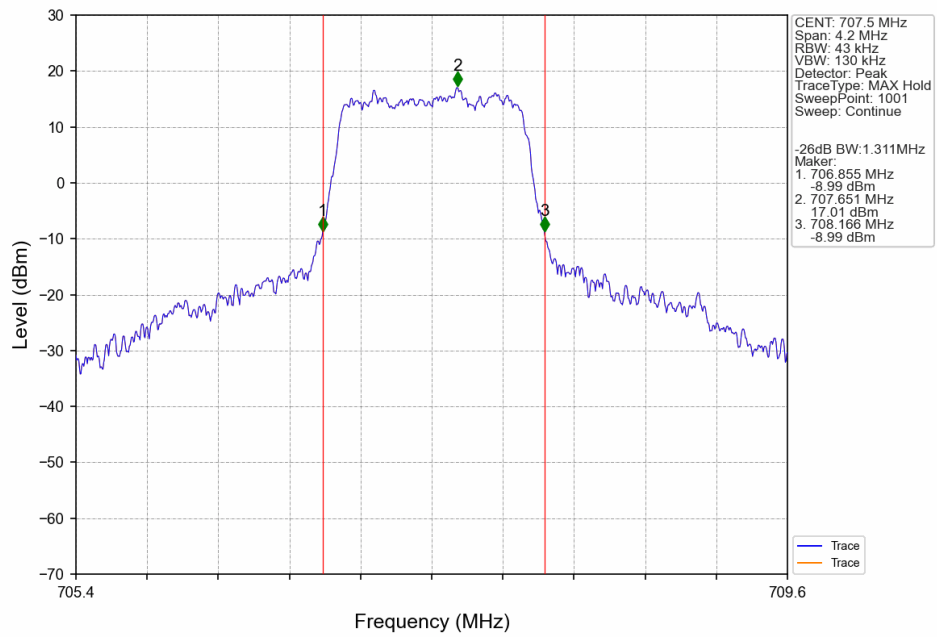
Band12 1.4MHz QPSK HCH 715.3MHz RB 6 0 NTNV



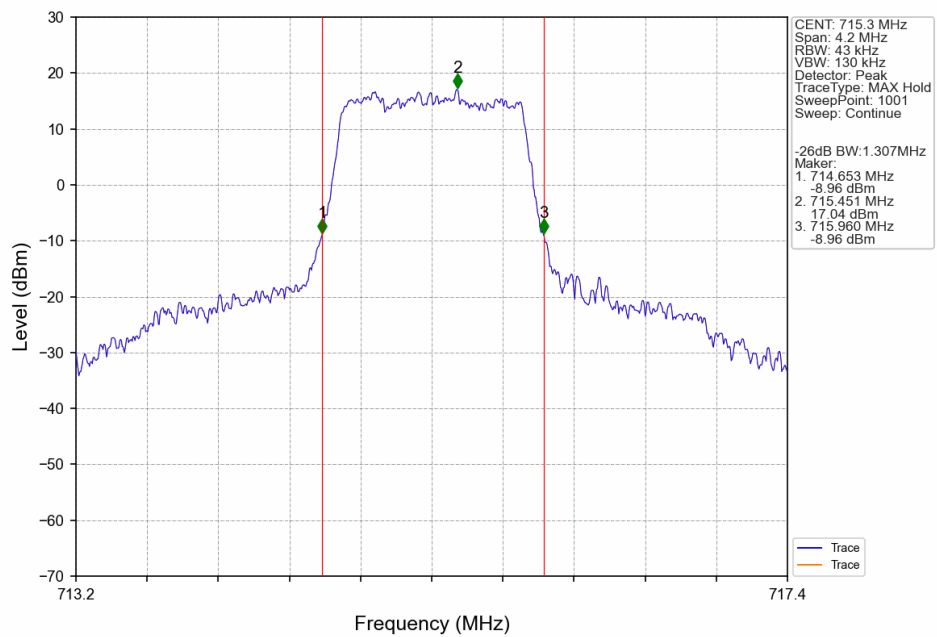
Band12 1.4MHz 16QAM LCH 699.7MHz RB 6 0 NTNV



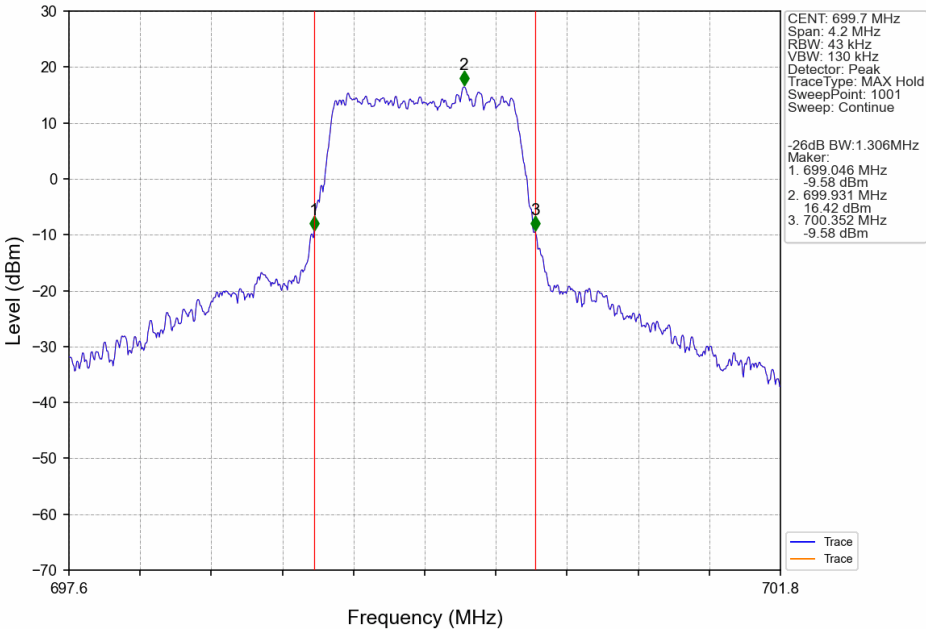
Band12 1.4MHz 16QAM MCH 707.5MHz RB 6 0 NTNV



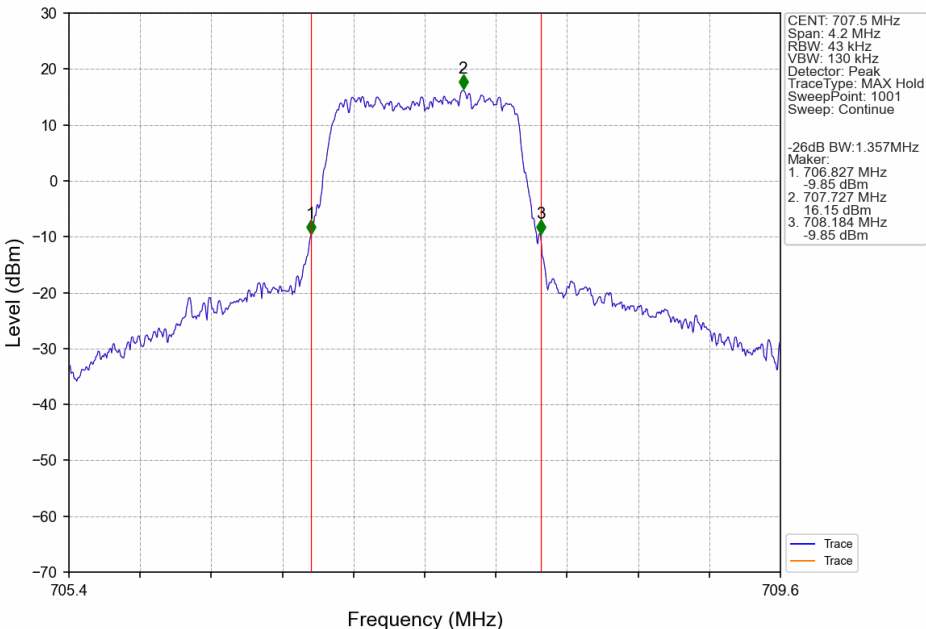
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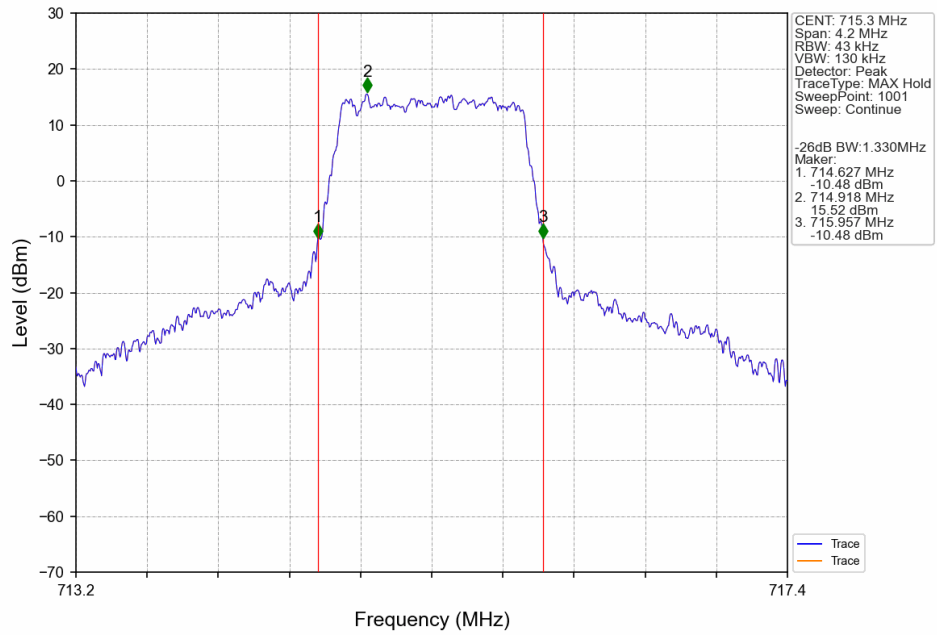
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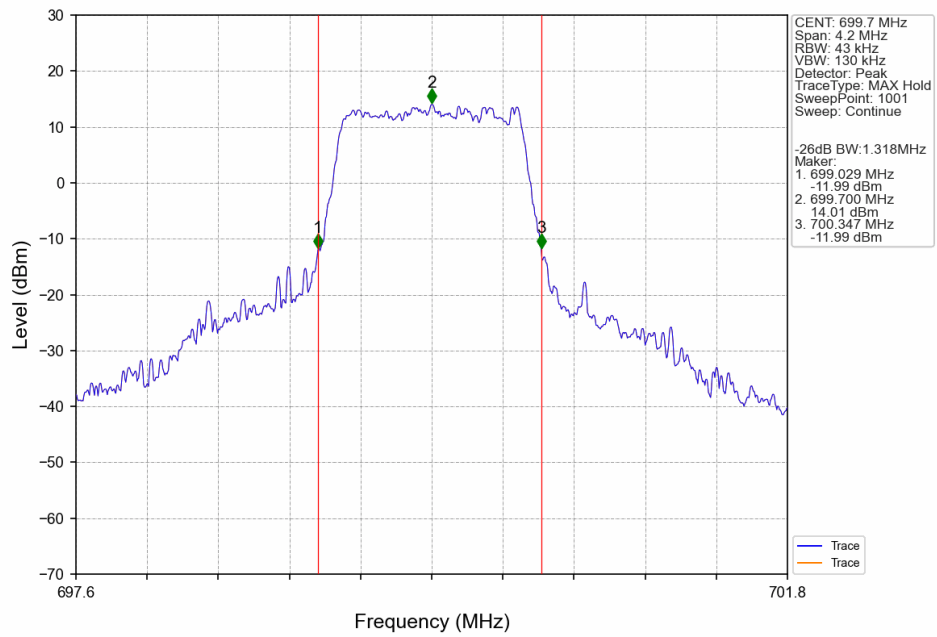
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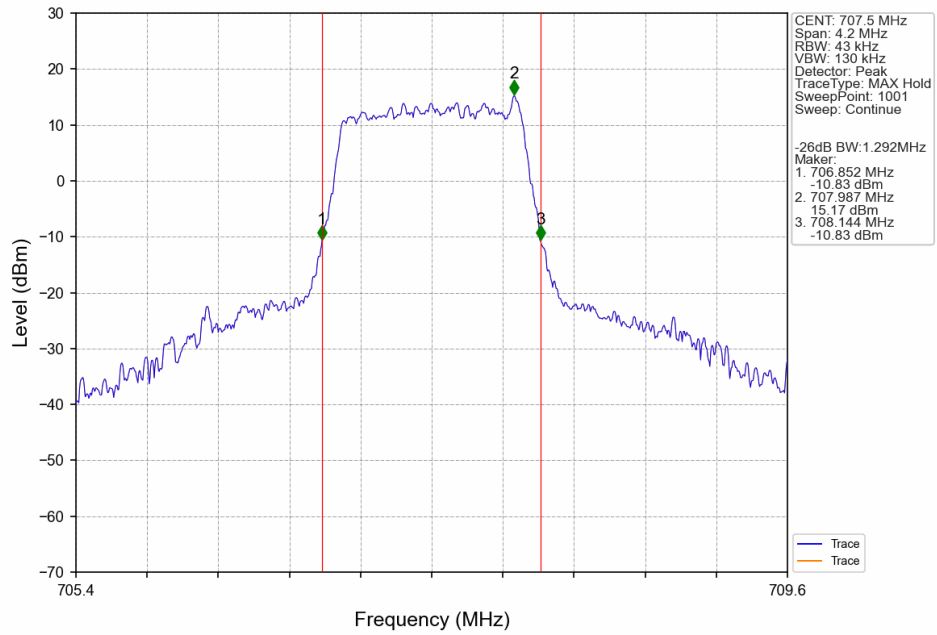
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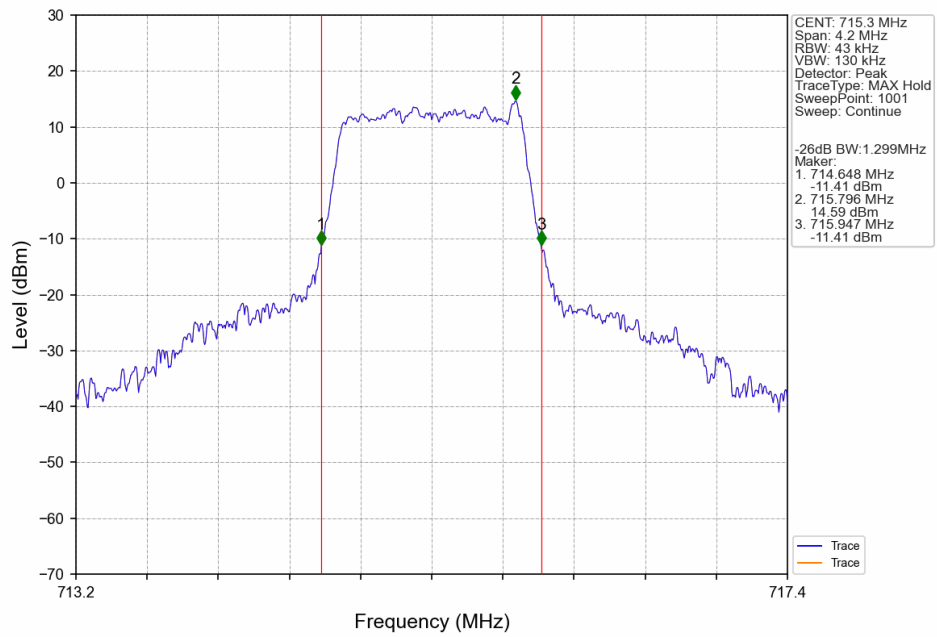
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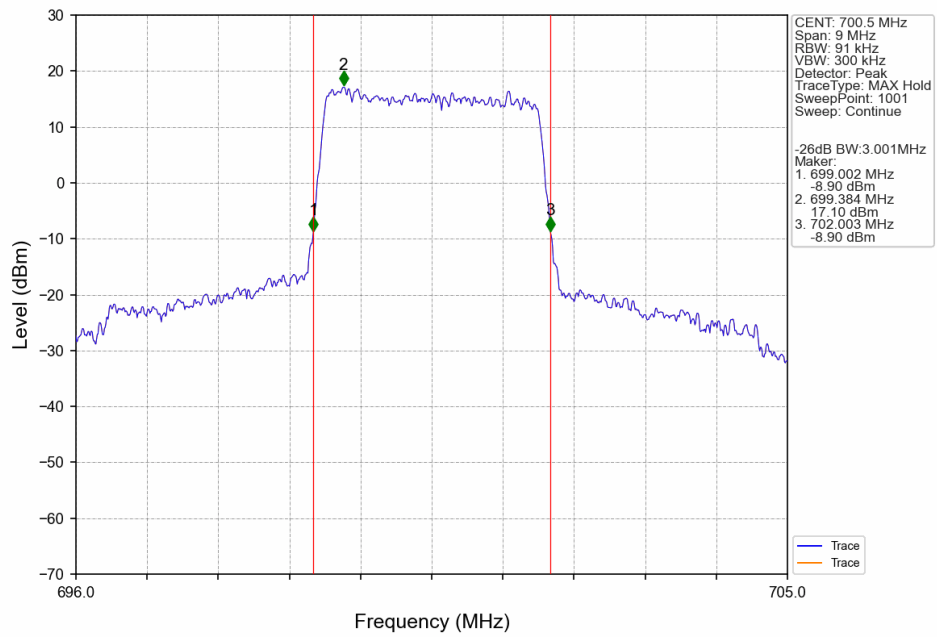
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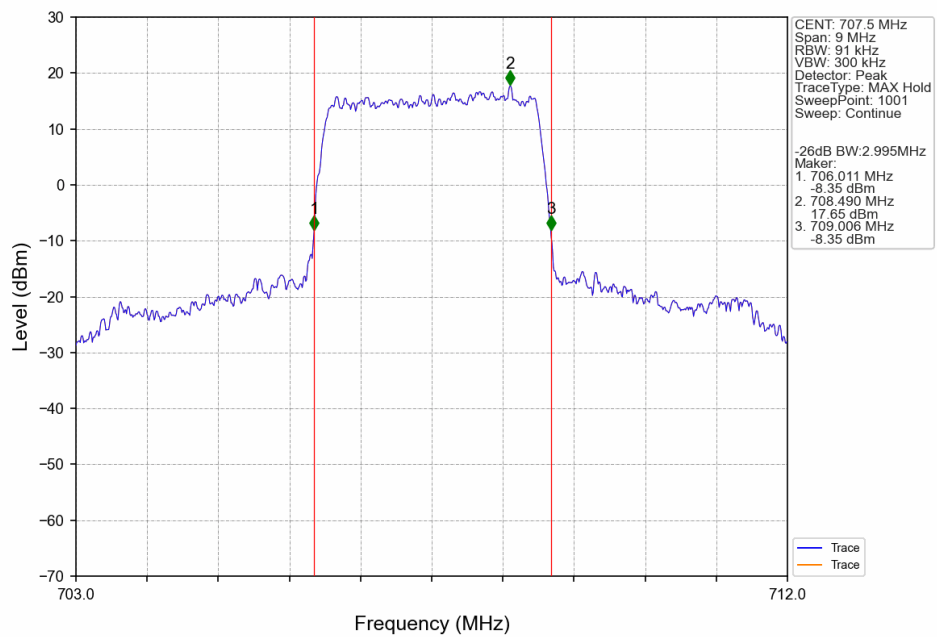
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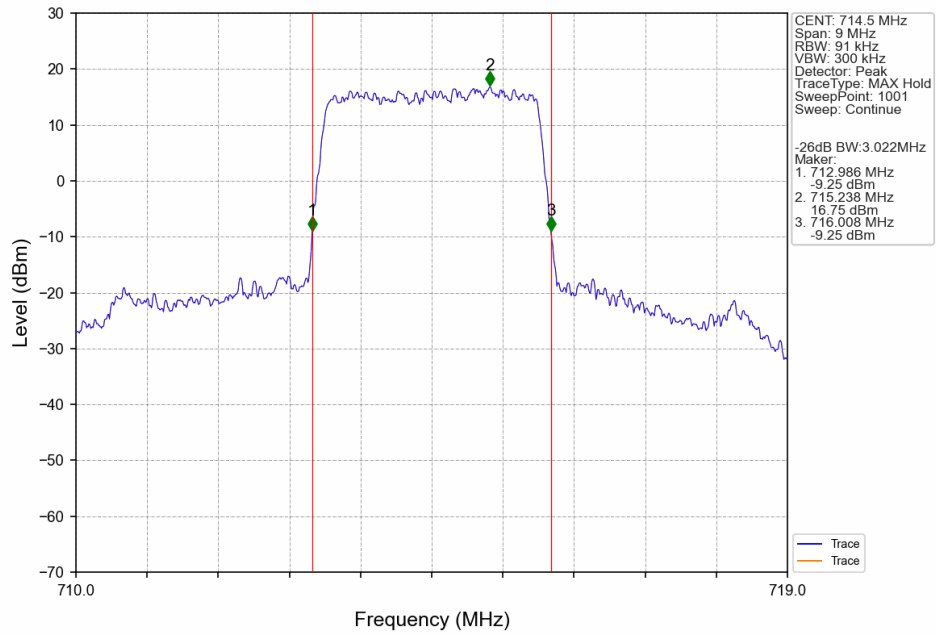
Band12 3MHz QPSK LCH 700.5MHz RB 15 0 NTNV



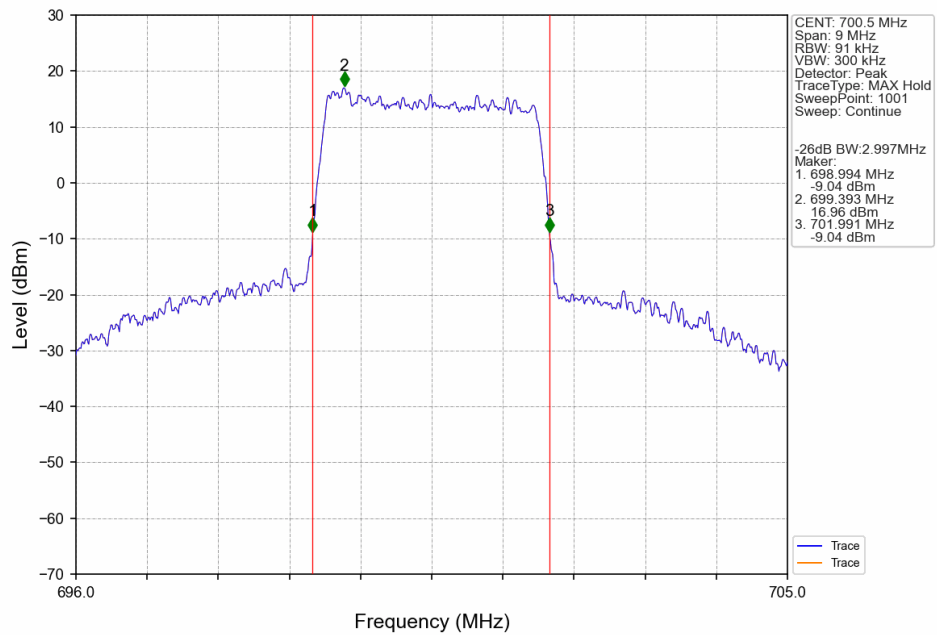
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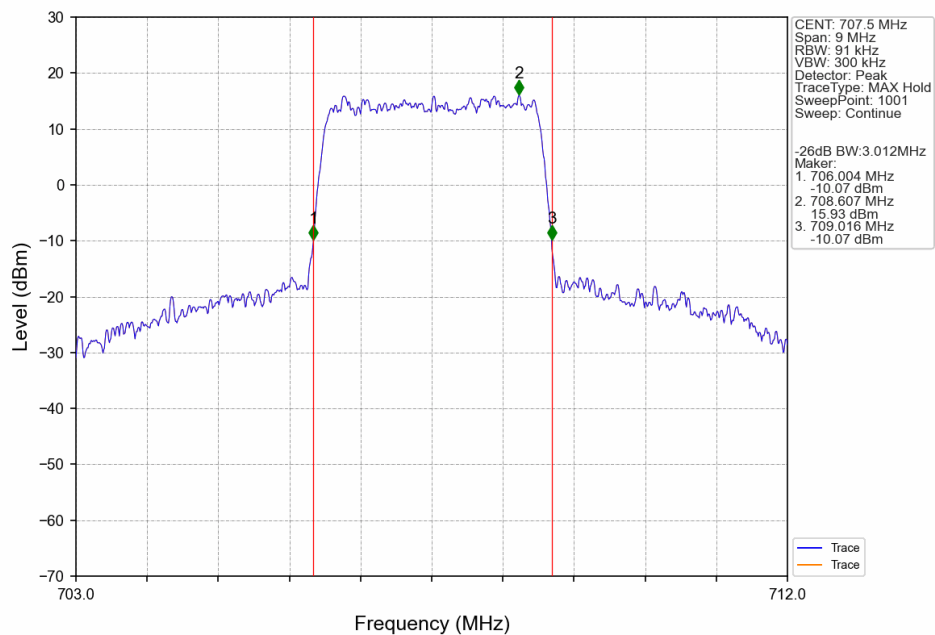
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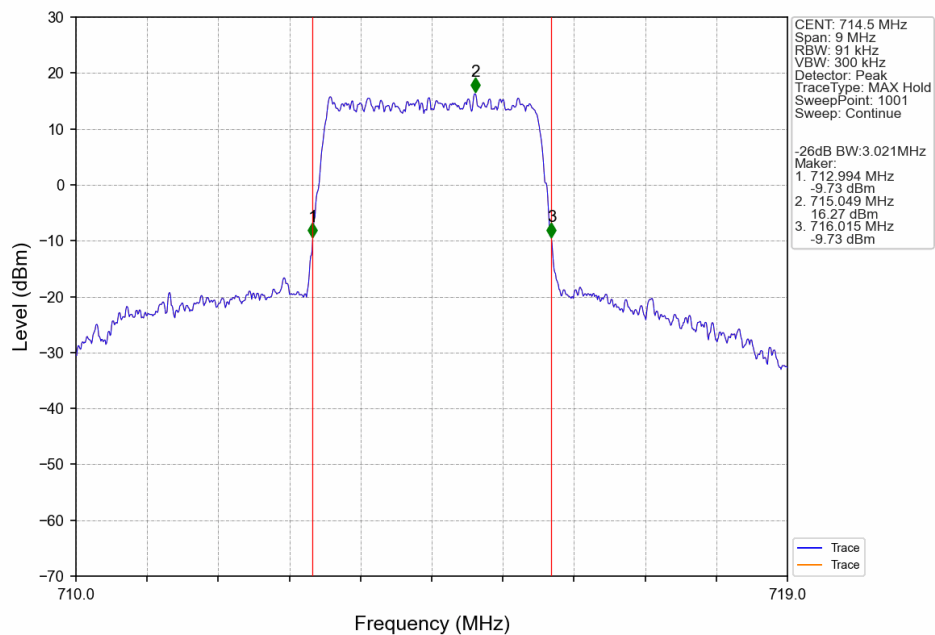
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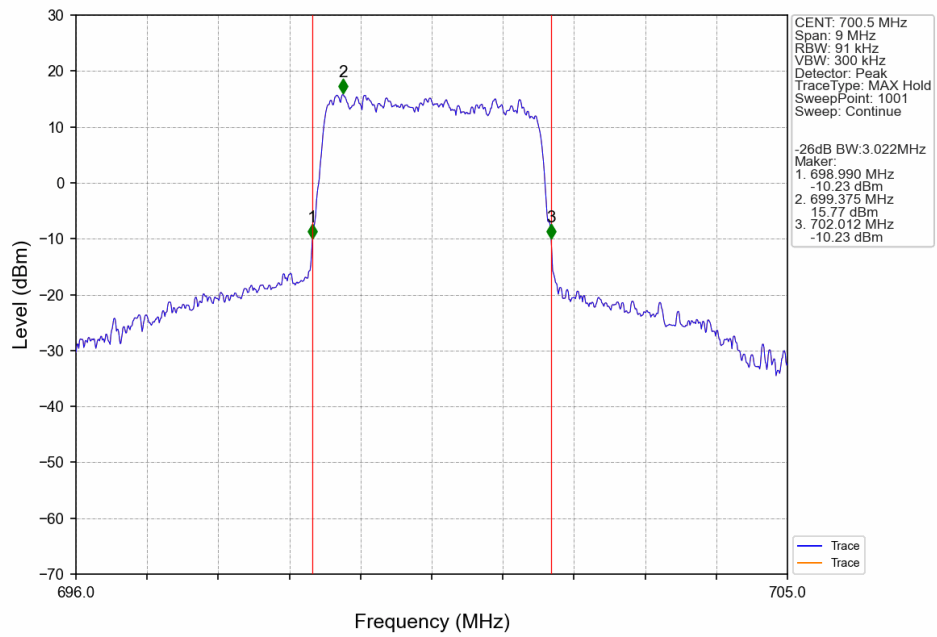
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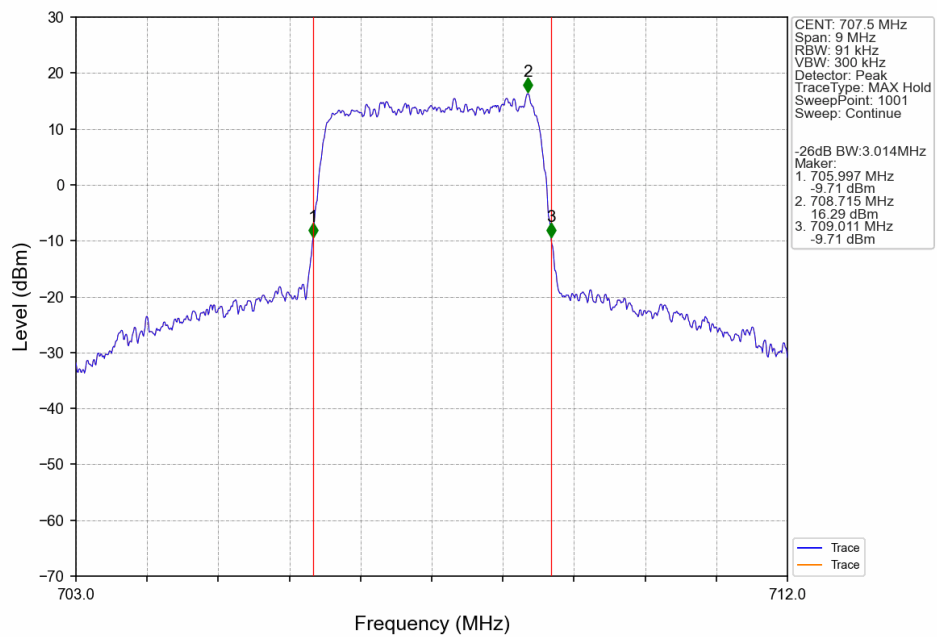
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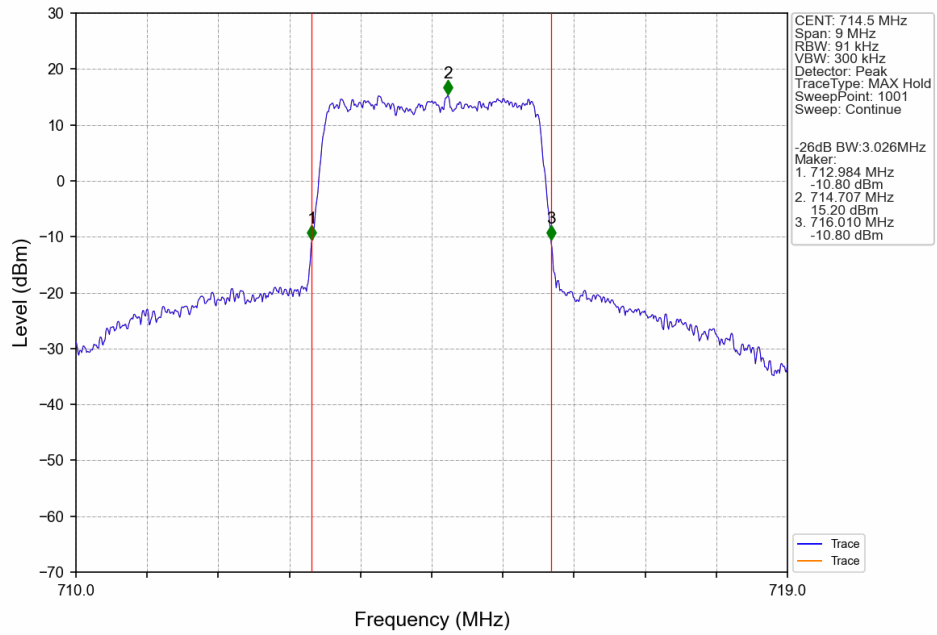
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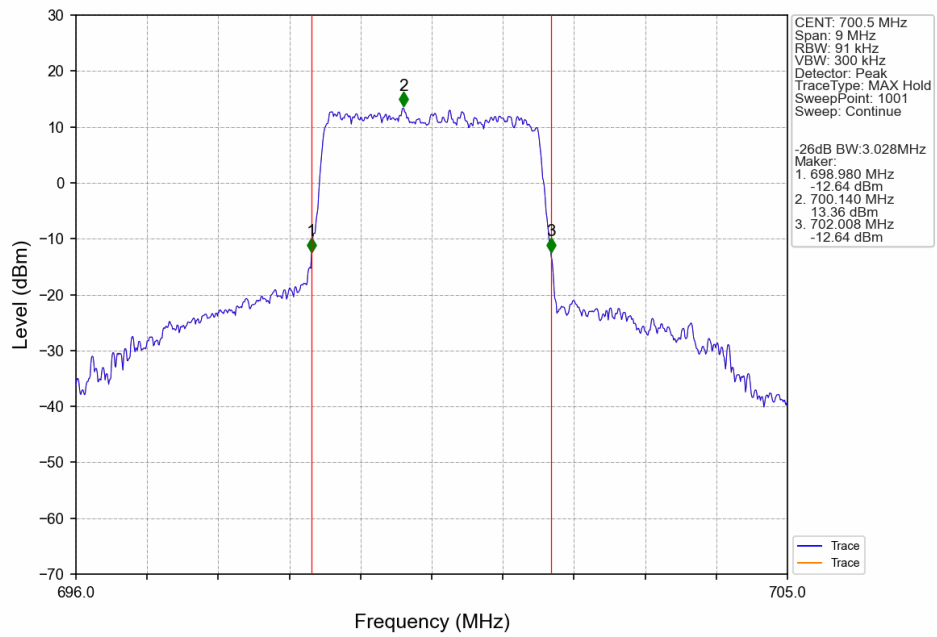
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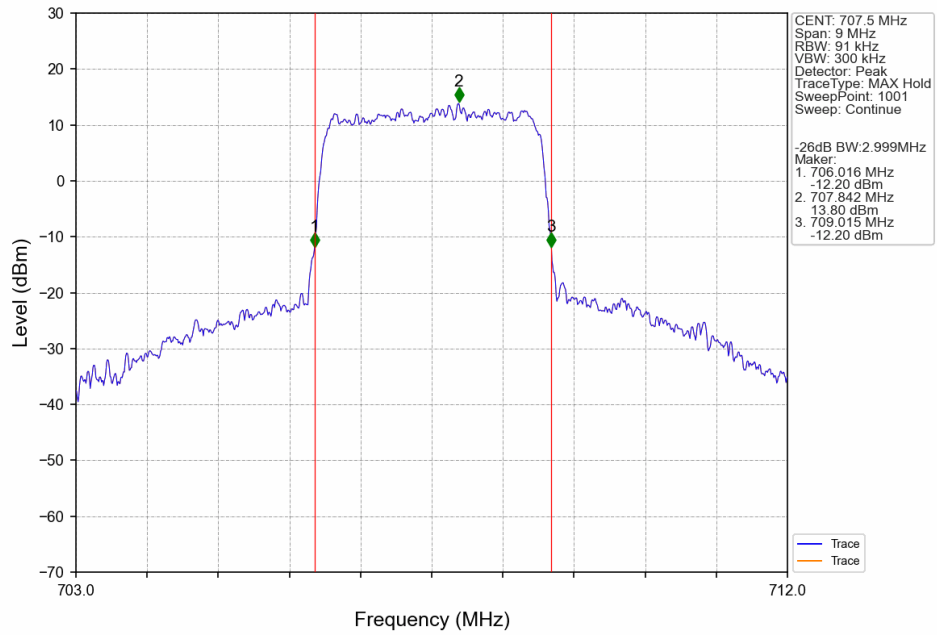
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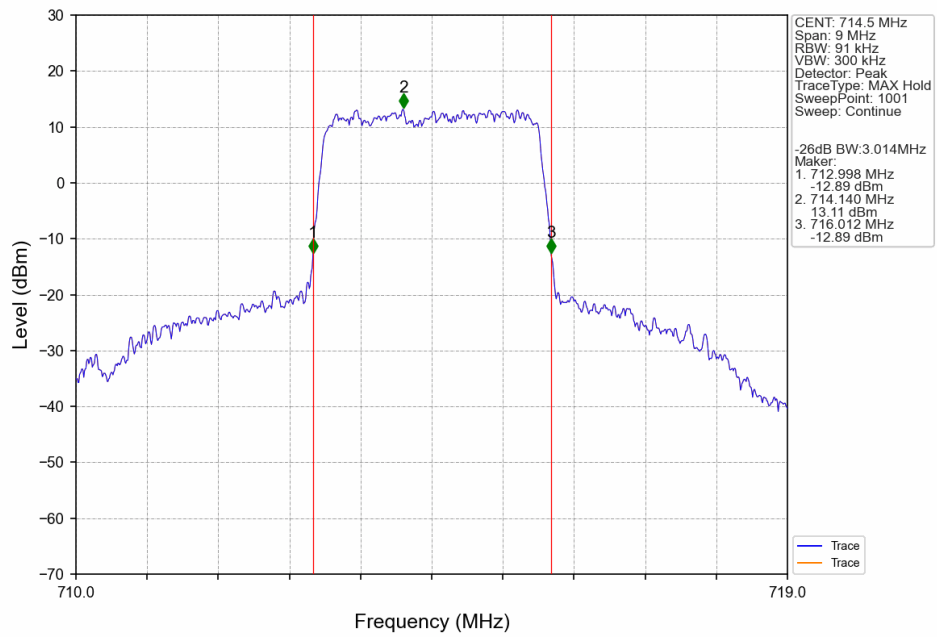
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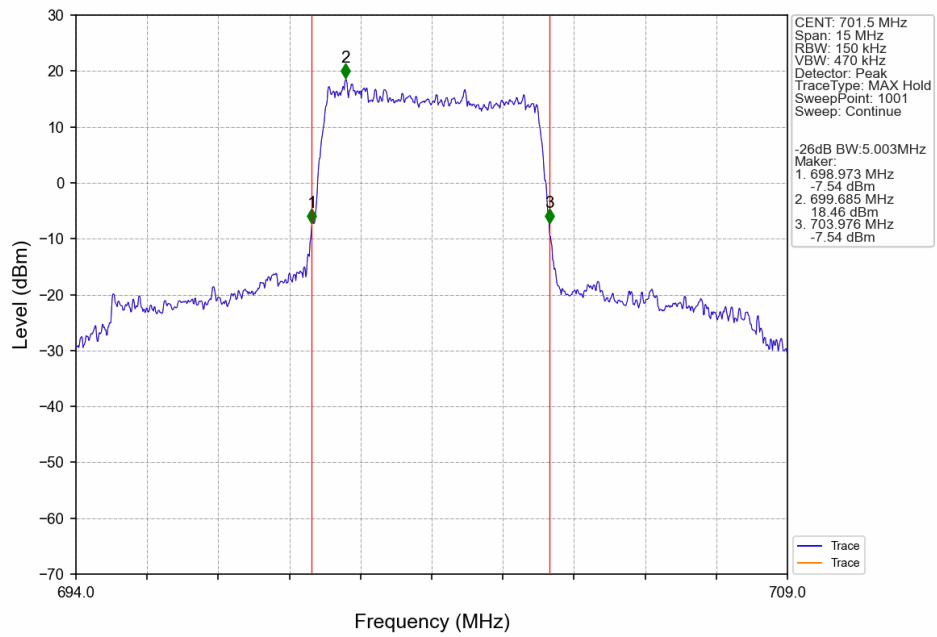
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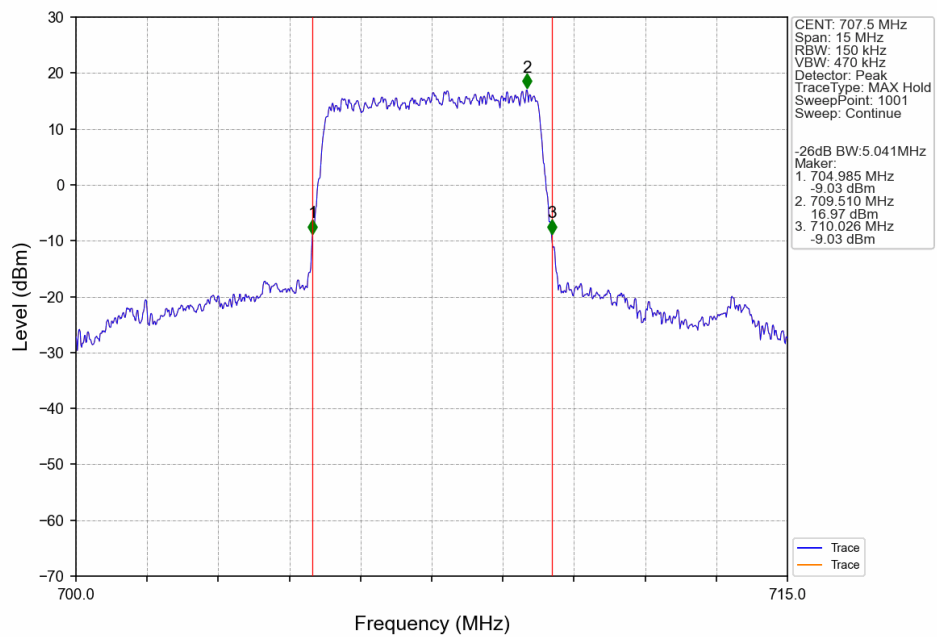
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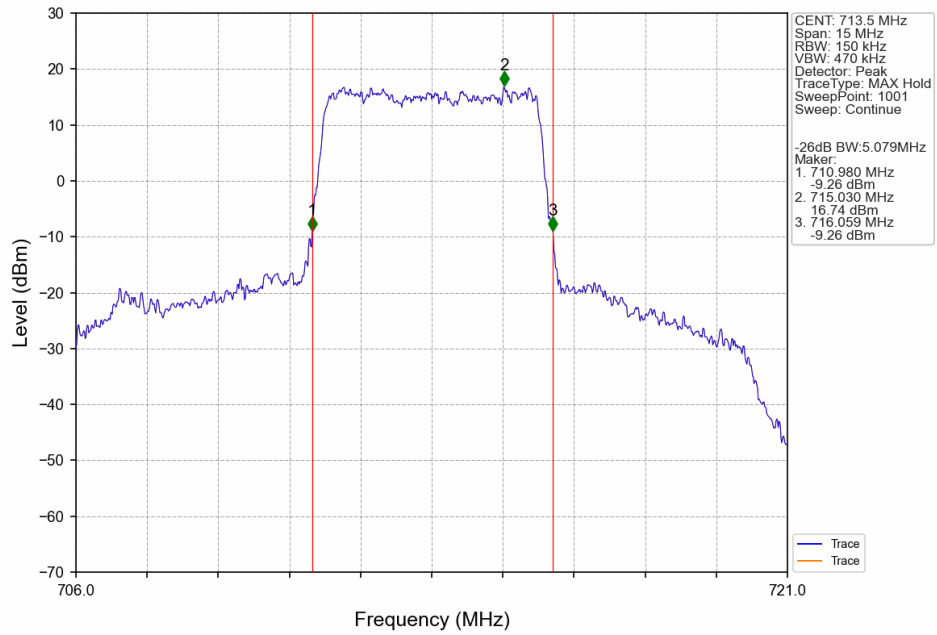
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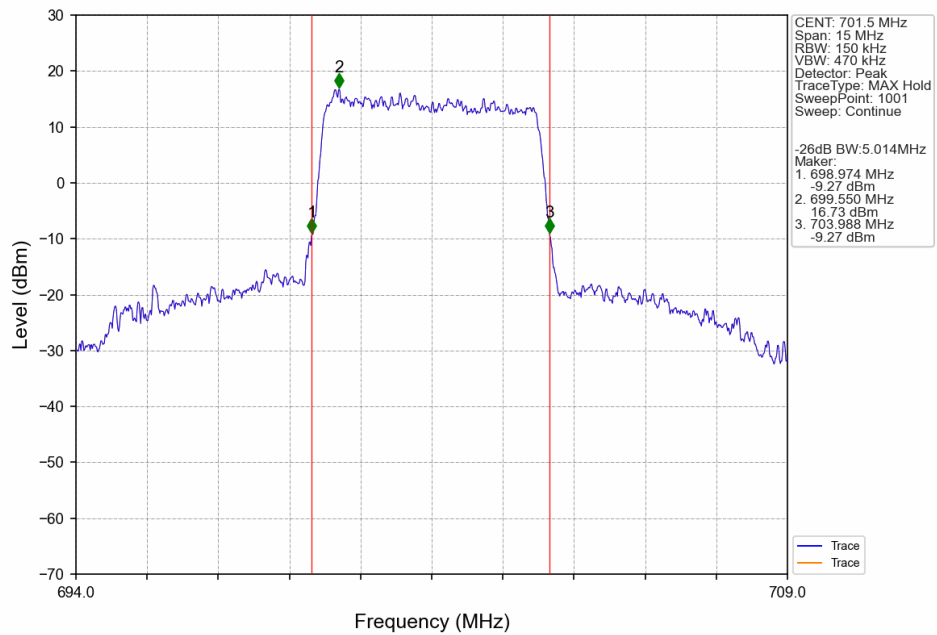
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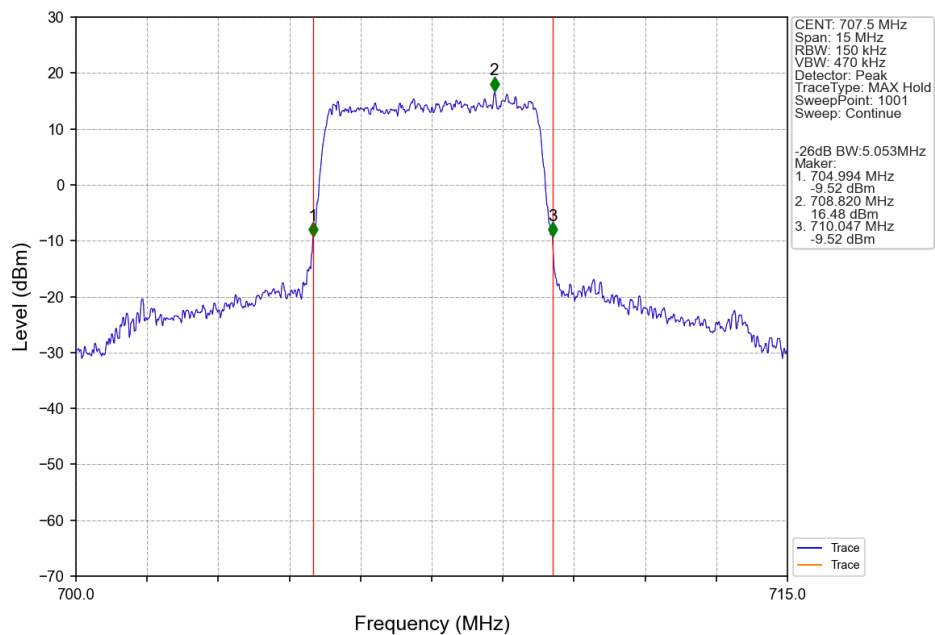
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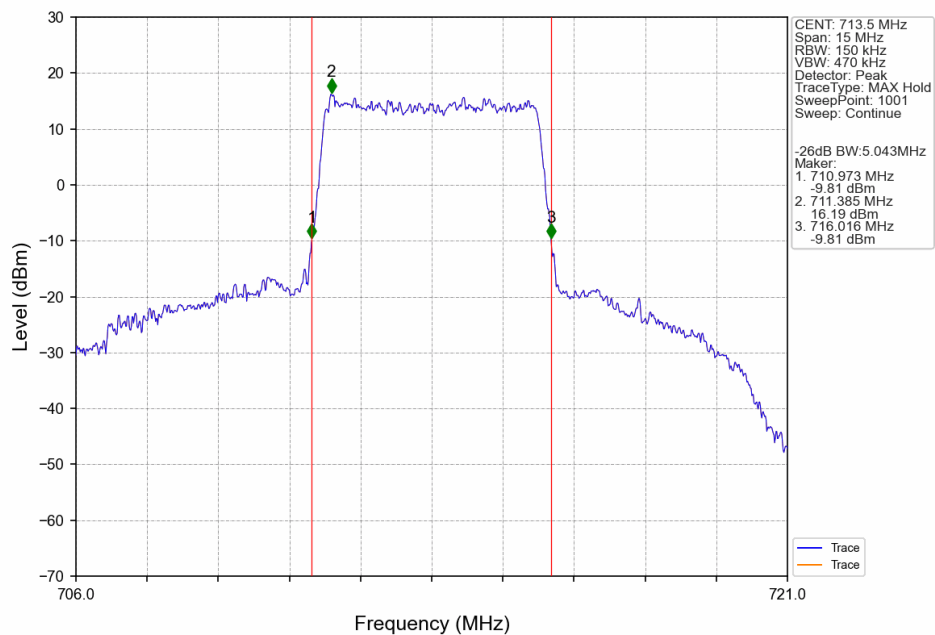
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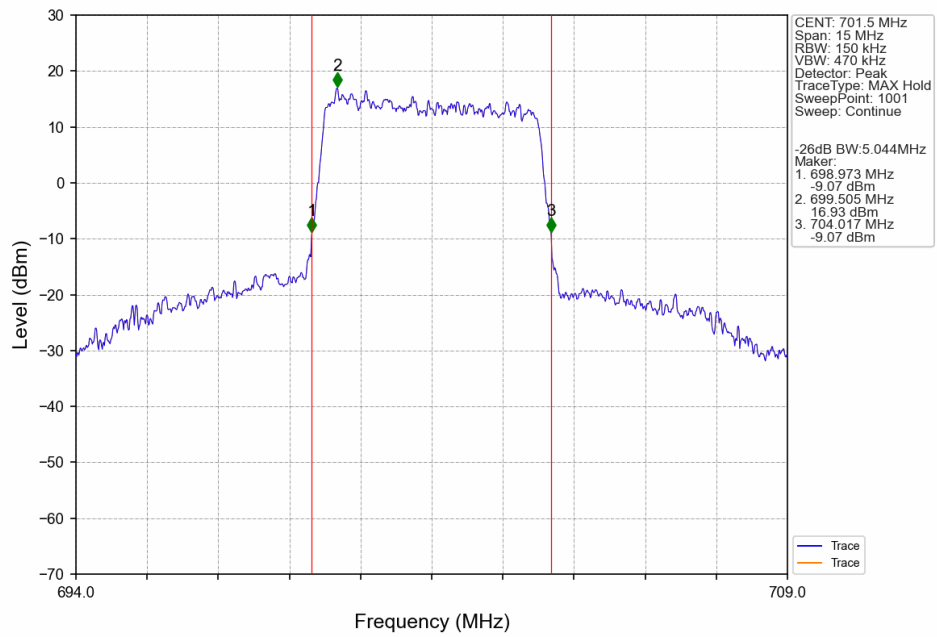
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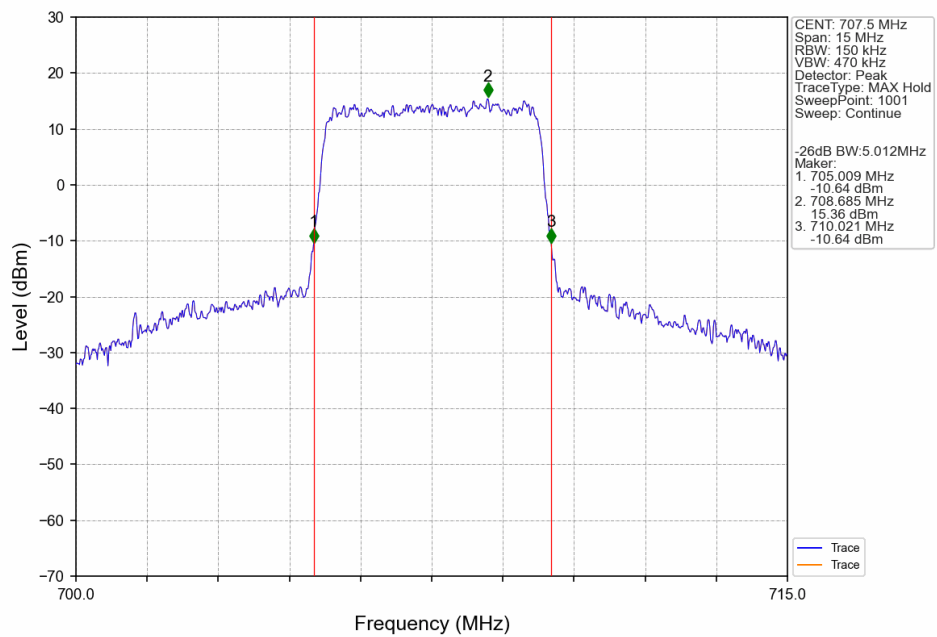
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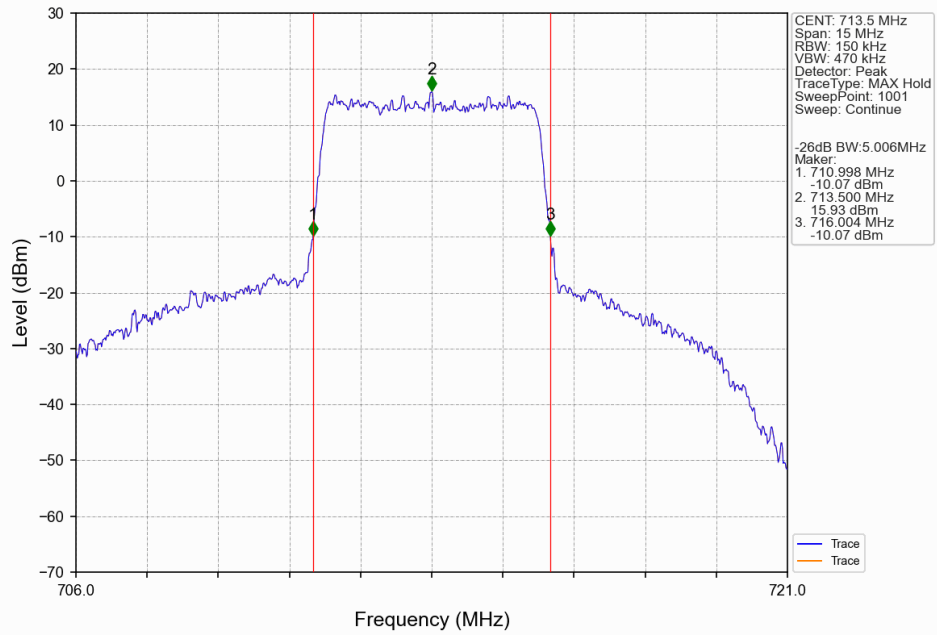
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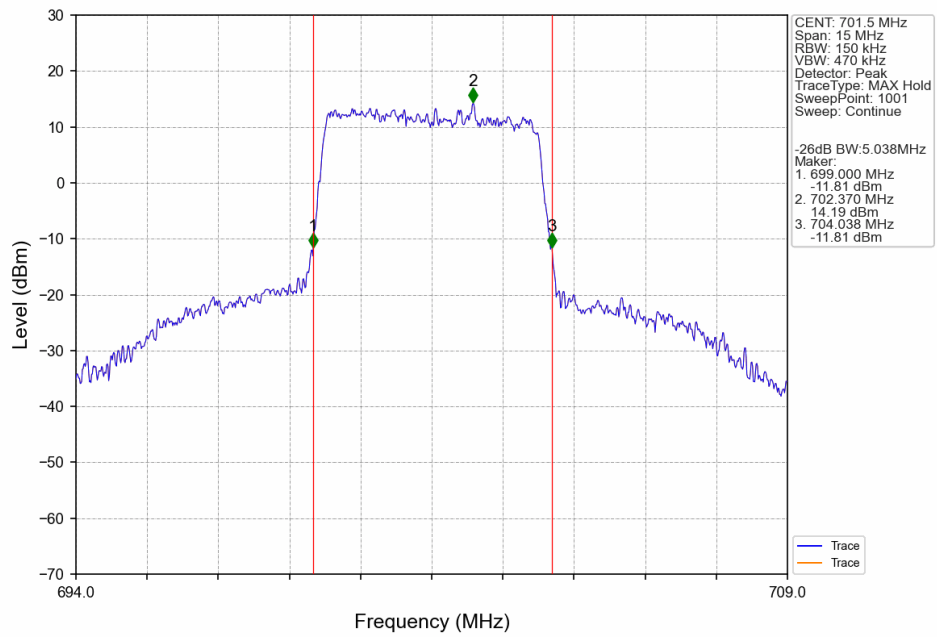
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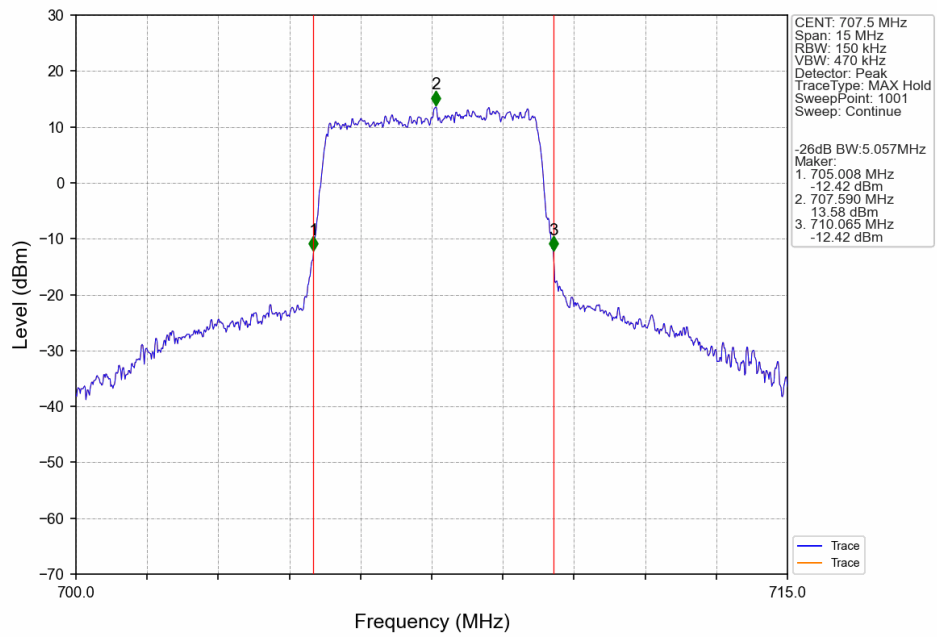
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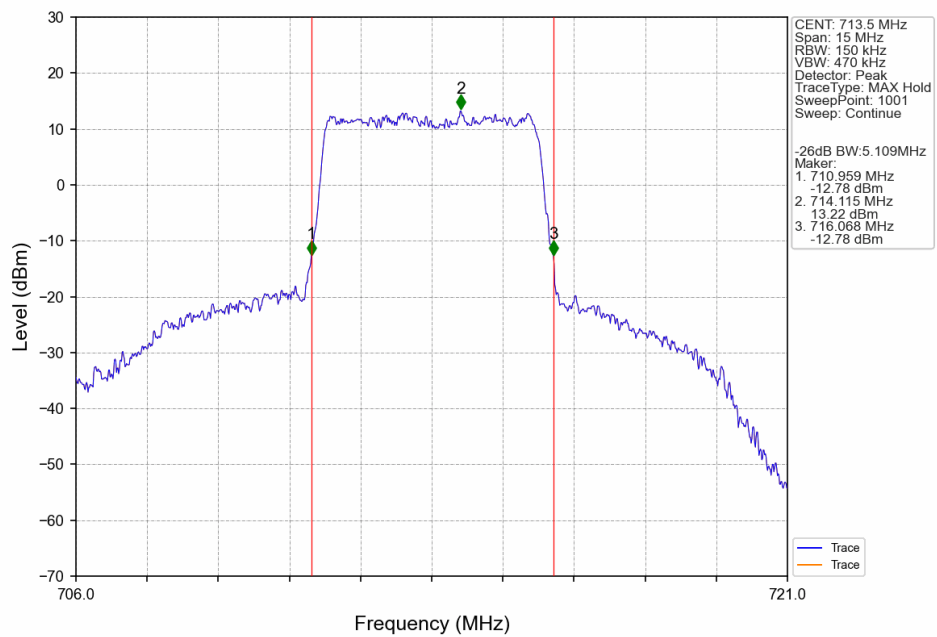
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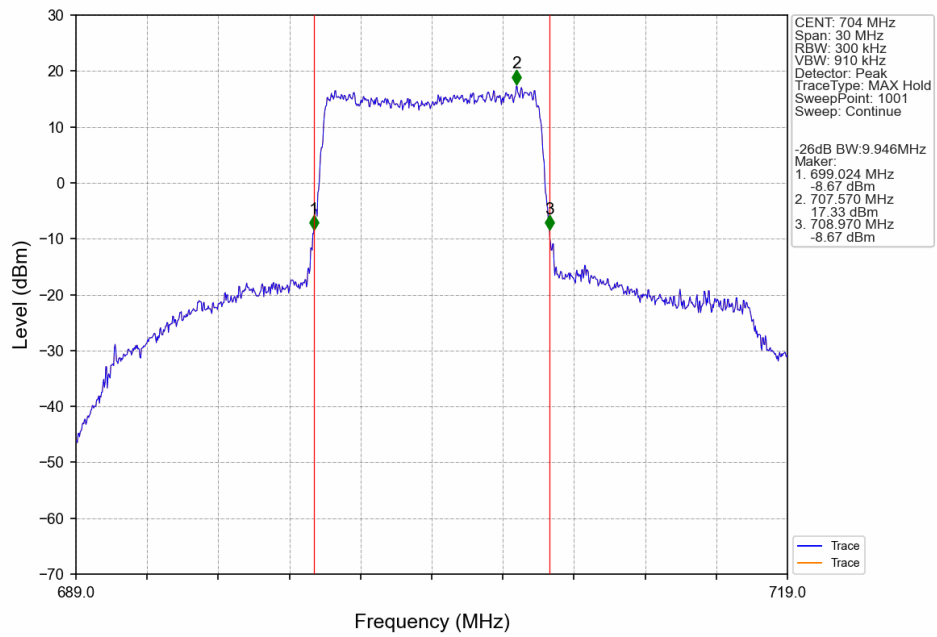
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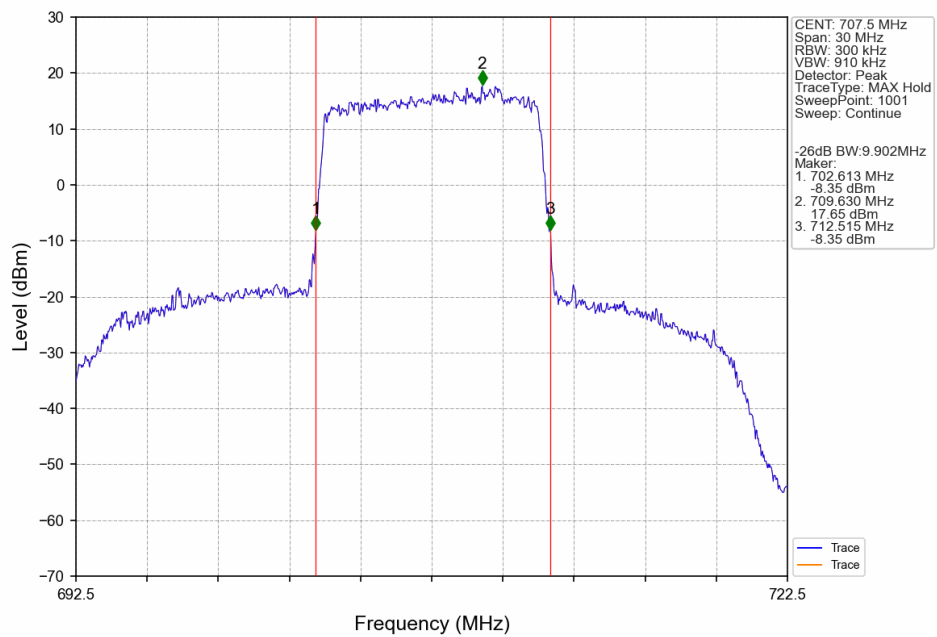
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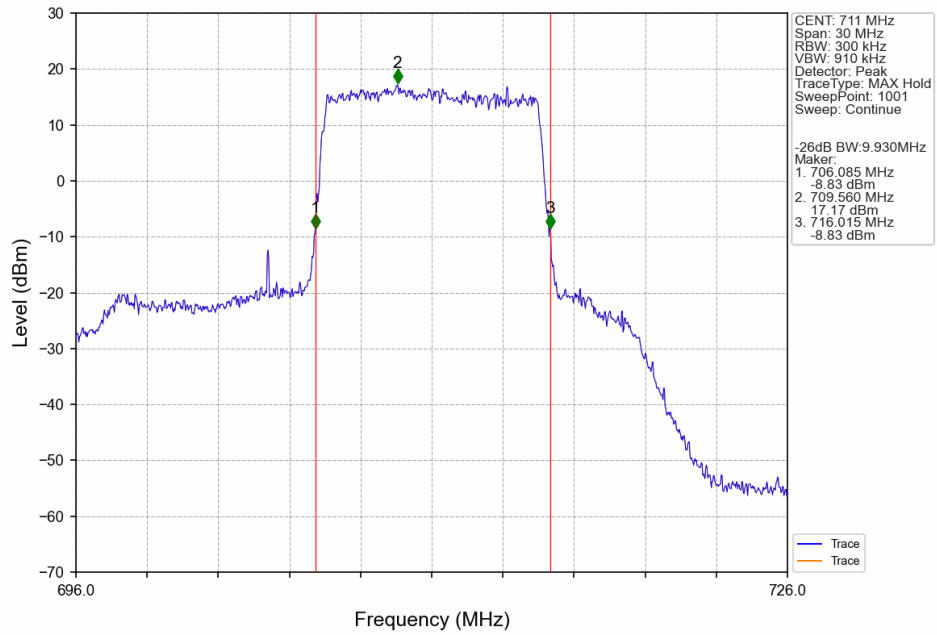
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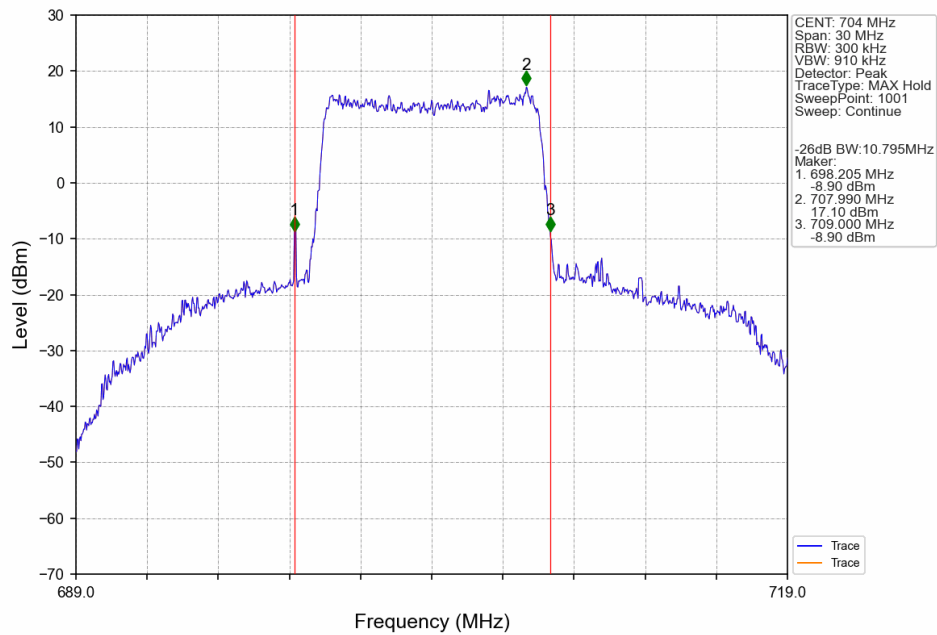
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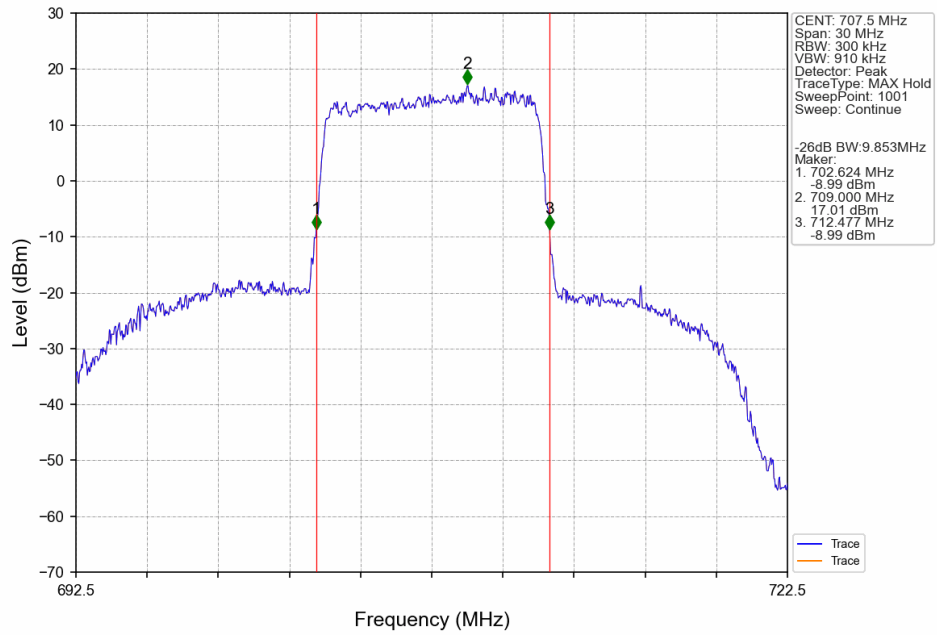
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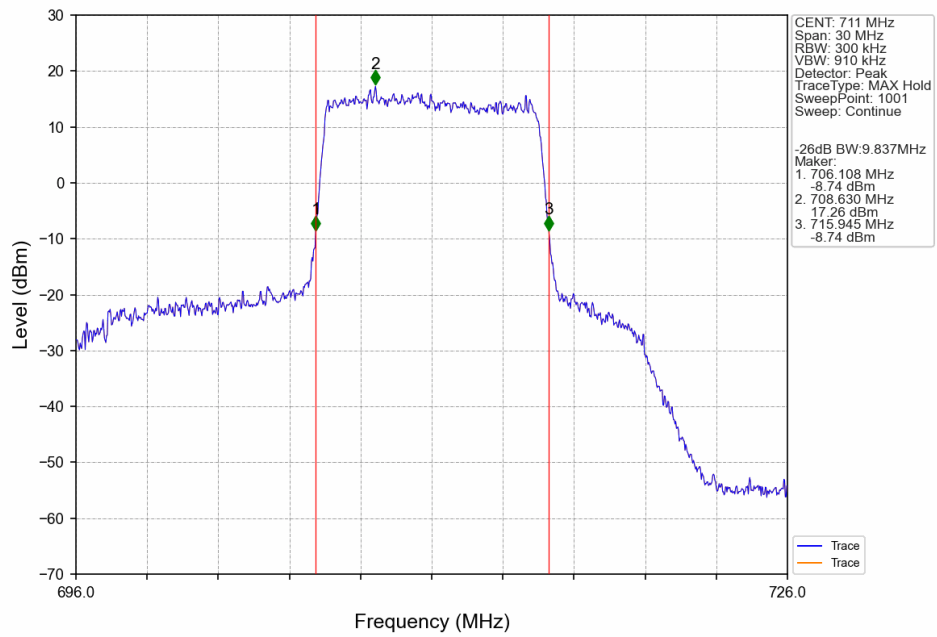
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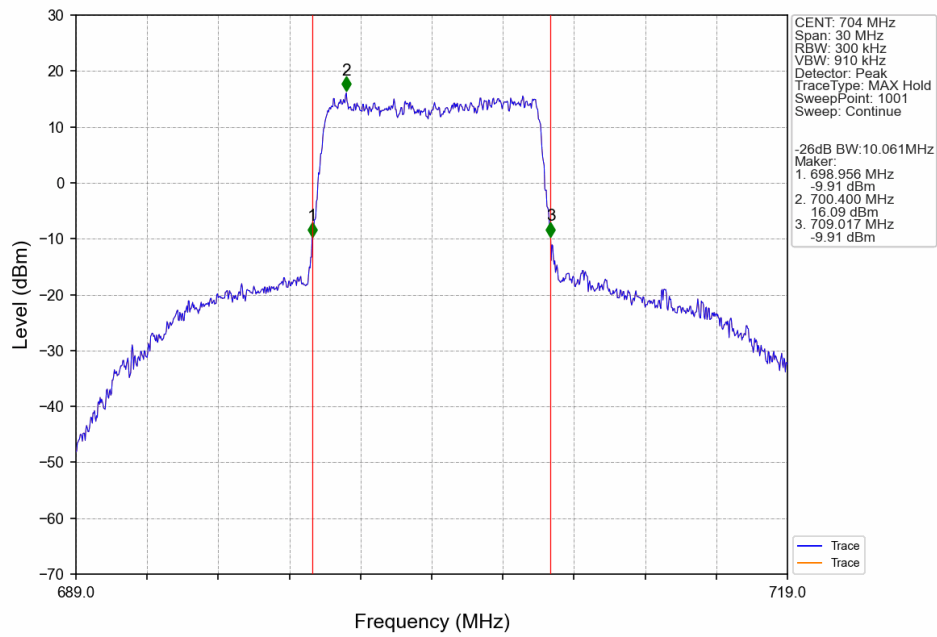
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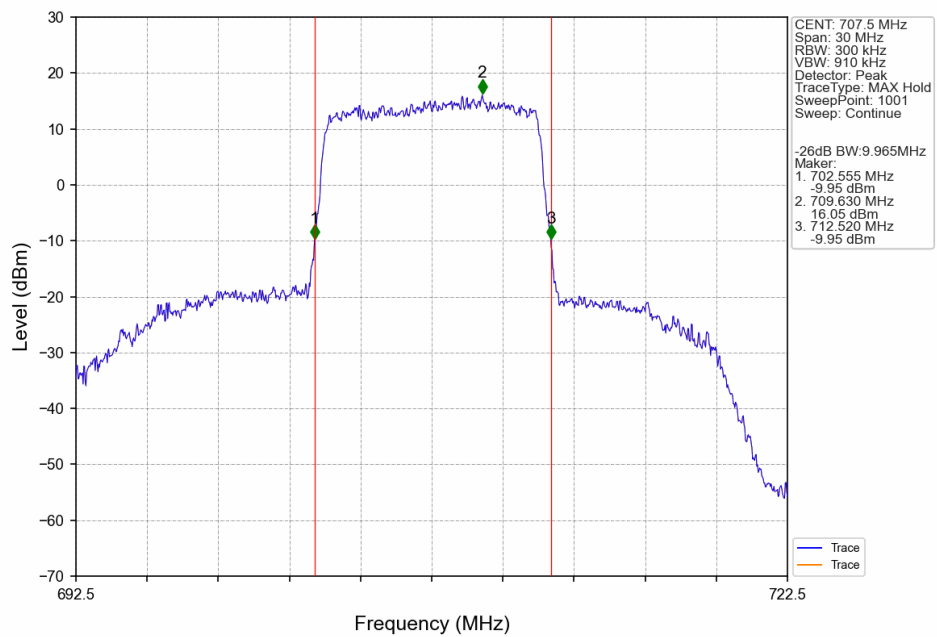
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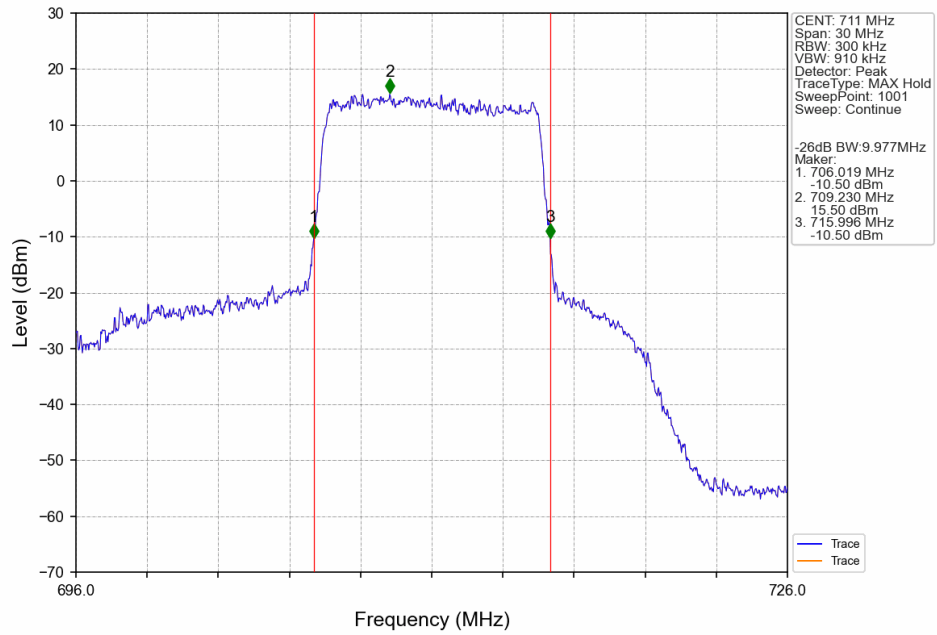
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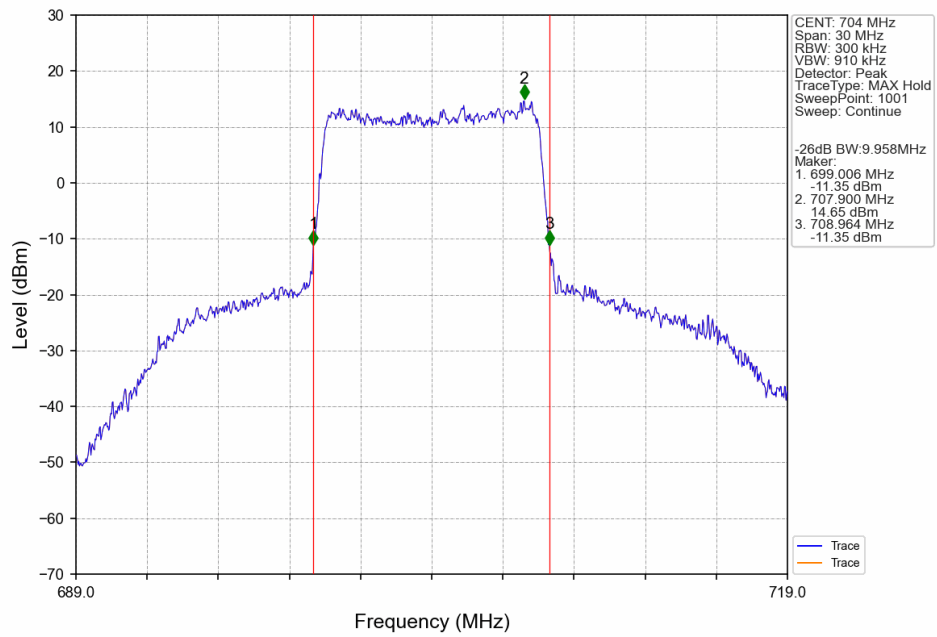
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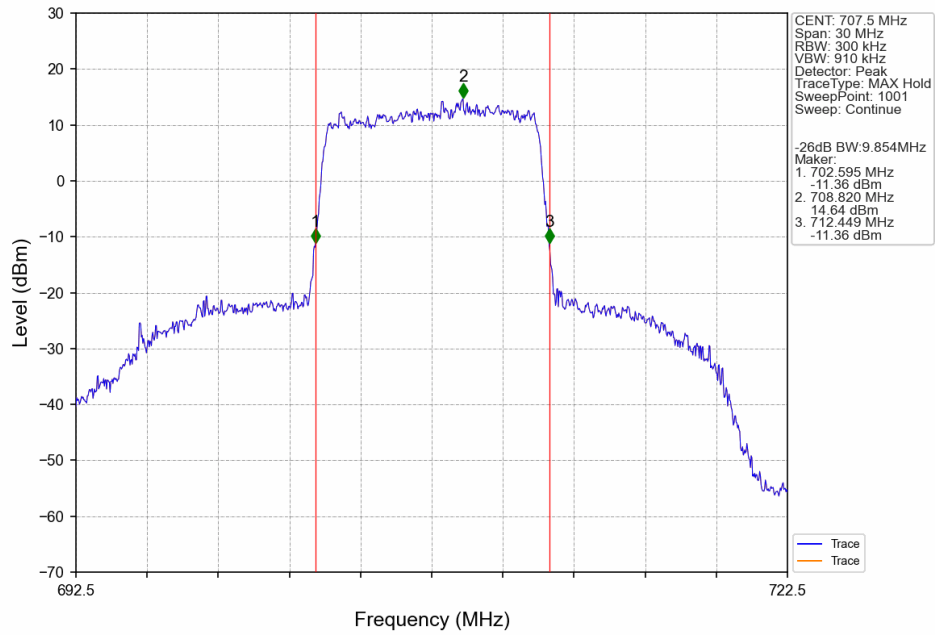
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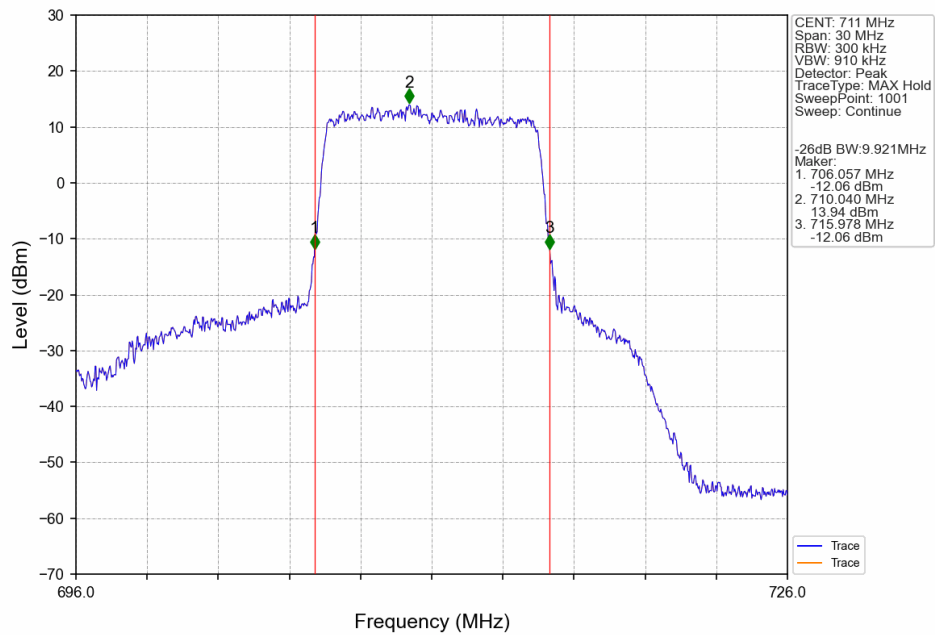
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Band12 10MHz 256QAM MCH 707.5MHz RB 50 0 NTNV



Band12 10MHz 256QAM HCH 711MHz RB 50 0 NTNV



4. Peak-Average Ratio

4.1 Test Result

4.1.1 B12_1.4MHz

Band: 12 / Bandwidth: 1.4MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	699.7	6	0	5.82	<=13	Pass
	707.5	6	0	5.22	<=13	Pass
	715.3	6	0	5.01	<=13	Pass
16QAM	699.7	6	0	6.64	<=13	Pass
	707.5	6	0	6.00	<=13	Pass
	715.3	6	0	5.87	<=13	Pass
64QAM	699.7	6	0	6.93	<=13	Pass
	707.5	6	0	6.50	<=13	Pass
	715.3	6	0	6.42	<=13	Pass
256QAM	699.7	6	0	7.36	<=13	Pass
	707.5	6	0	7.20	<=13	Pass
	715.3	6	0	7.15	<=13	Pass

4.1.2 B12_3MHz

Band: 12 / Bandwidth: 3MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	700.5	15	0	5.95	<=13	Pass
	707.5	15	0	5.31	<=13	Pass
	714.5	15	0	5.34	<=13	Pass
16QAM	700.5	15	0	6.79	<=13	Pass
	707.5	15	0	6.17	<=13	Pass
	714.5	15	0	6.22	<=13	Pass
64QAM	700.5	15	0	7.01	<=13	Pass
	707.5	15	0	6.54	<=13	Pass
	714.5	15	0	6.58	<=13	Pass
256QAM	700.5	15	0	7.26	<=13	Pass
	707.5	15	0	7.10	<=13	Pass
	714.5	15	0	7.09	<=13	Pass

4.1.3 B12_5MHz

Band: 12 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	701.5	25	0	5.90	<=13	Pass
	707.5	25	0	5.48	<=13	Pass
	713.5	25	0	5.67	<=13	Pass
16QAM	701.5	25	0	6.62	<=13	Pass
	707.5	25	0	6.20	<=13	Pass
	713.5	25	0	6.40	<=13	Pass
64QAM	701.5	25	0	6.94	<=13	Pass

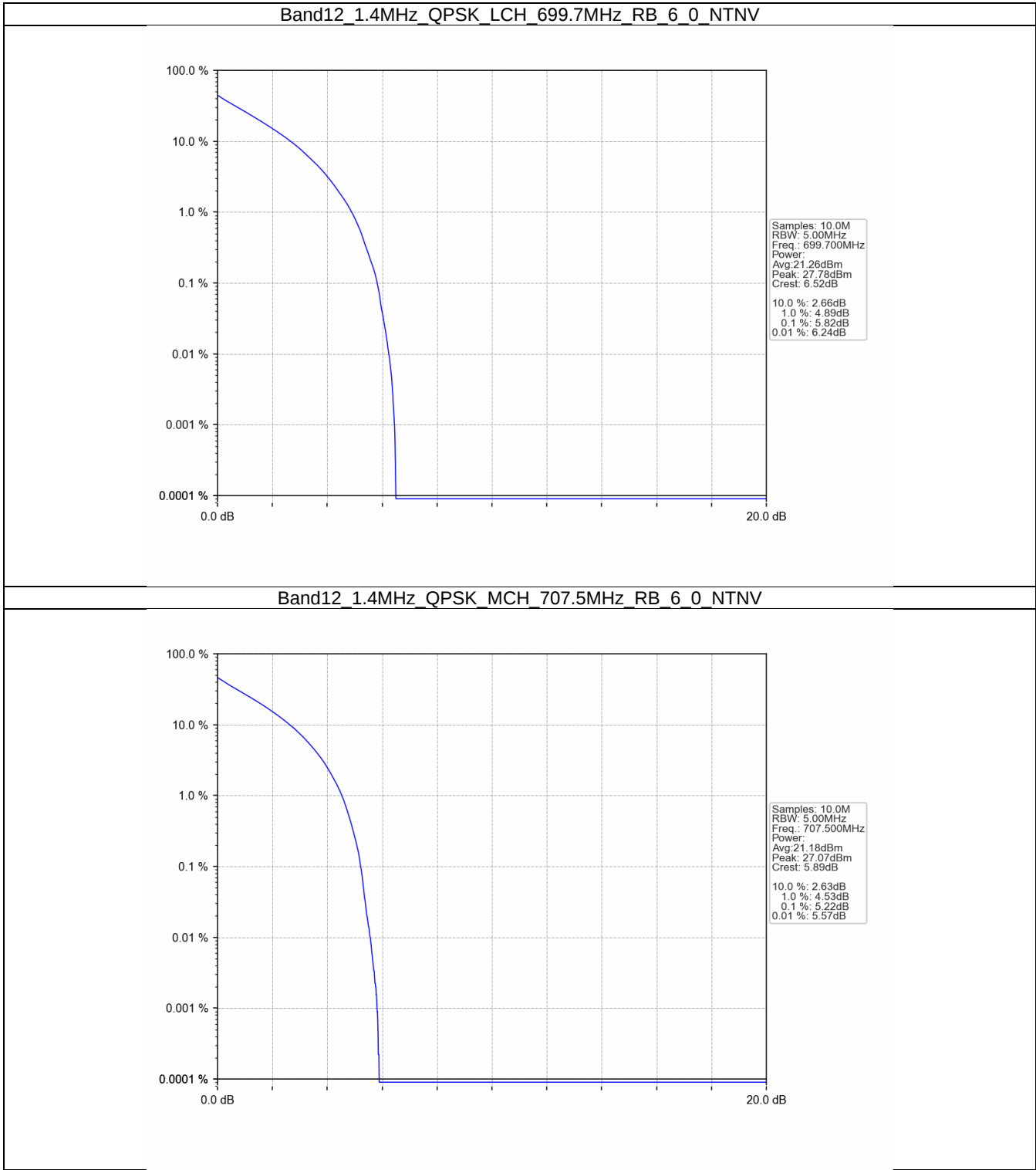
256QAM	707.5	25	0	6.59	<=13	Pass
	713.5	25	0	6.74	<=13	Pass
	701.5	25	0	7.17	<=13	Pass
	707.5	25	0	7.02	<=13	Pass
	713.5	25	0	7.12	<=13	Pass

4.1.4 B12_10MHz

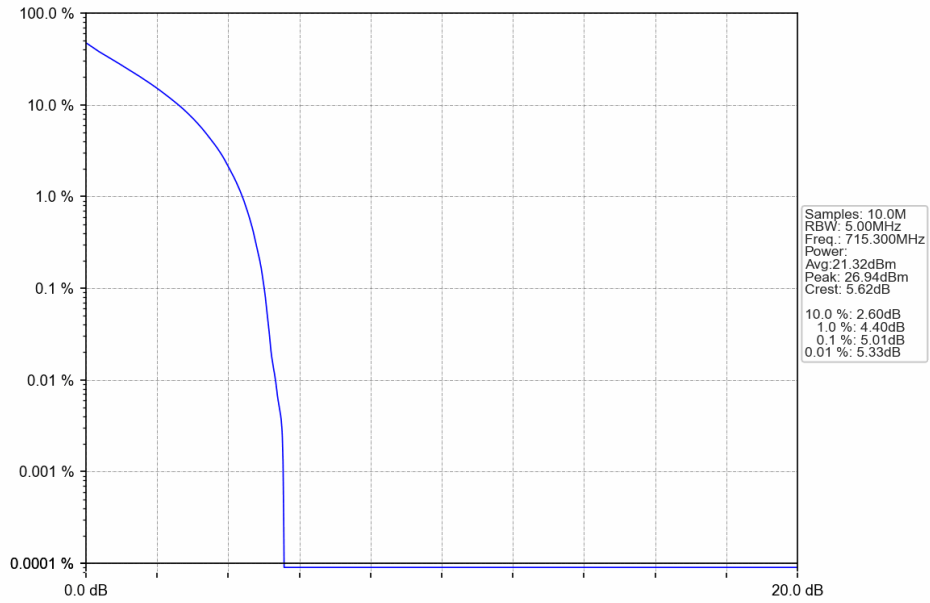
Band: 12 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	704	50	0	5.85	<=13	Pass
	707.5	50	0	5.62	<=13	Pass
	711	50	0	5.55	<=13	Pass
16QAM	704	50	0	6.51	<=13	Pass
	707.5	50	0	6.36	<=13	Pass
	711	50	0	6.31	<=13	Pass
64QAM	704	50	0	6.94	<=13	Pass
	707.5	50	0	6.70	<=13	Pass
	711	50	0	6.69	<=13	Pass
256QAM	704	50	0	7.14	<=13	Pass
	707.5	50	0	6.95	<=13	Pass
	711	50	0	6.97	<=13	Pass

4.2 Test Graph

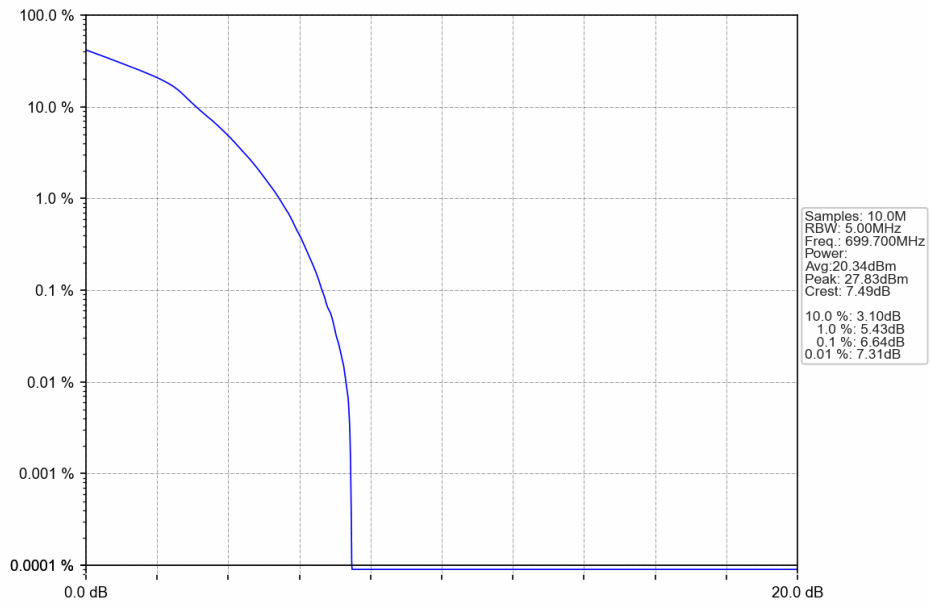
4.2.1 B12_1.4MHz



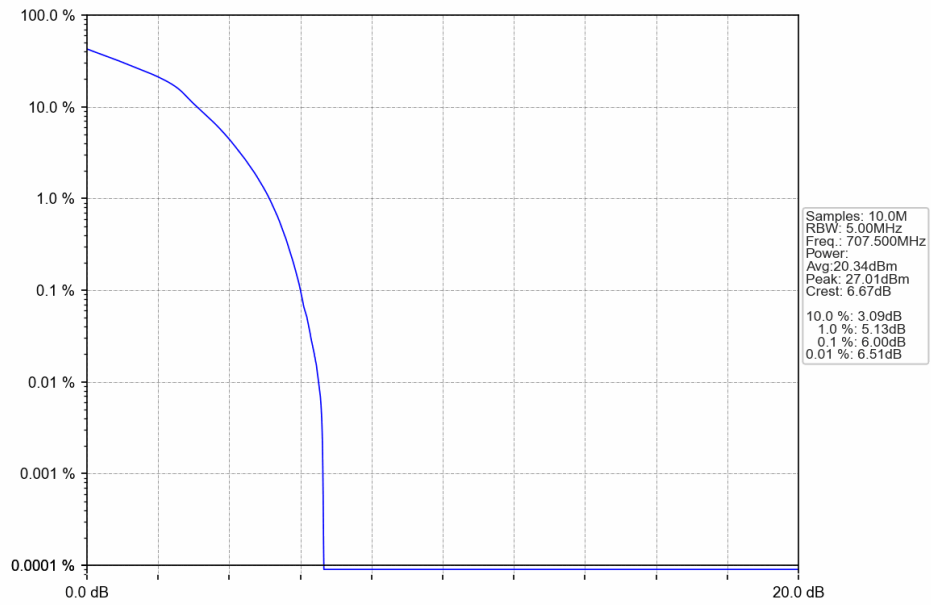
Band12 1.4MHz QPSK HCH 715.3MHz RB 6 0 NTNV



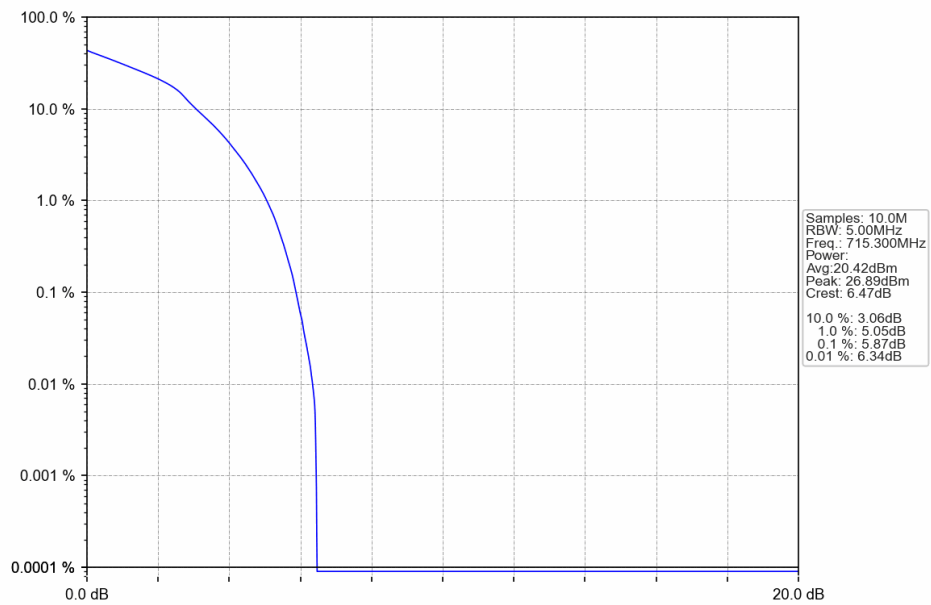
Band12 1.4MHz 16QAM LCH 699.7MHz RB 6 0 NTNV



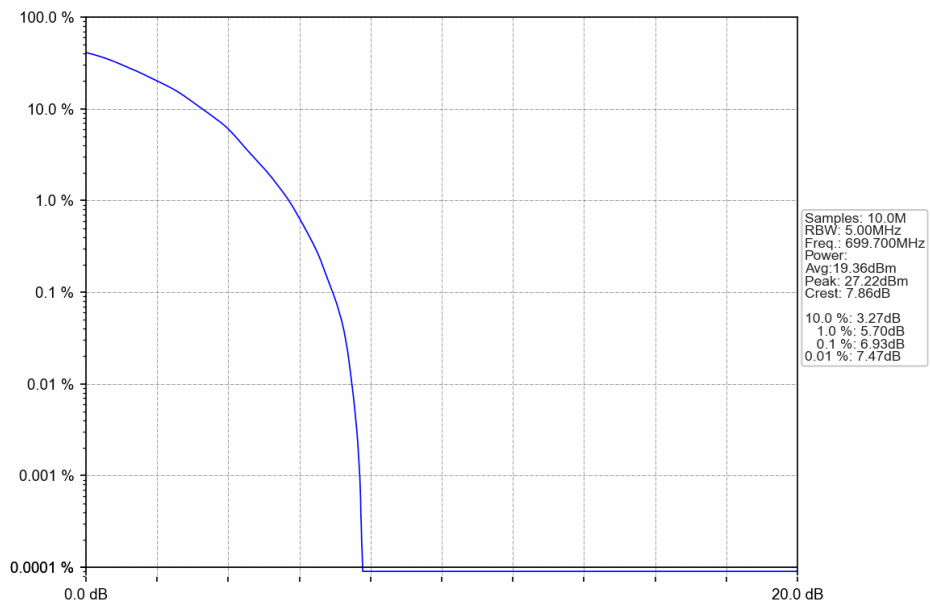
Band12 1.4MHz 16QAM MCH 707.5MHz RB 6 0 NTNV



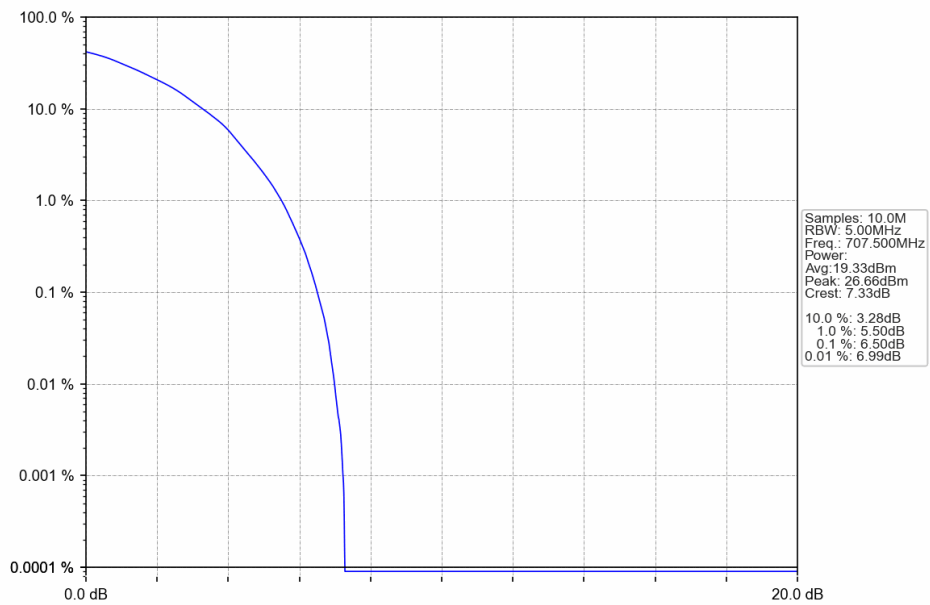
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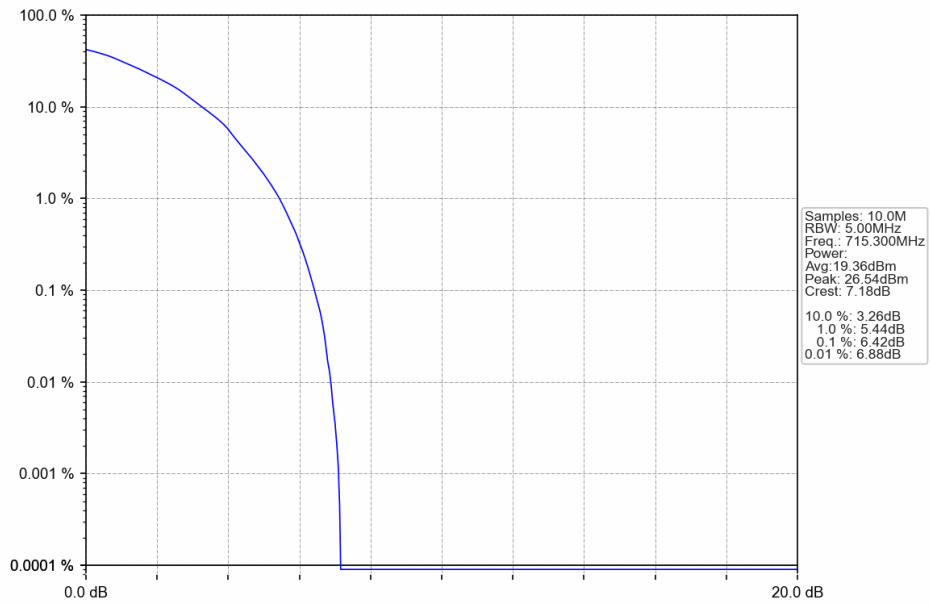
Band12 1.4MHz 64QAM LCH 699.7MHz RB 6 0 NTNV



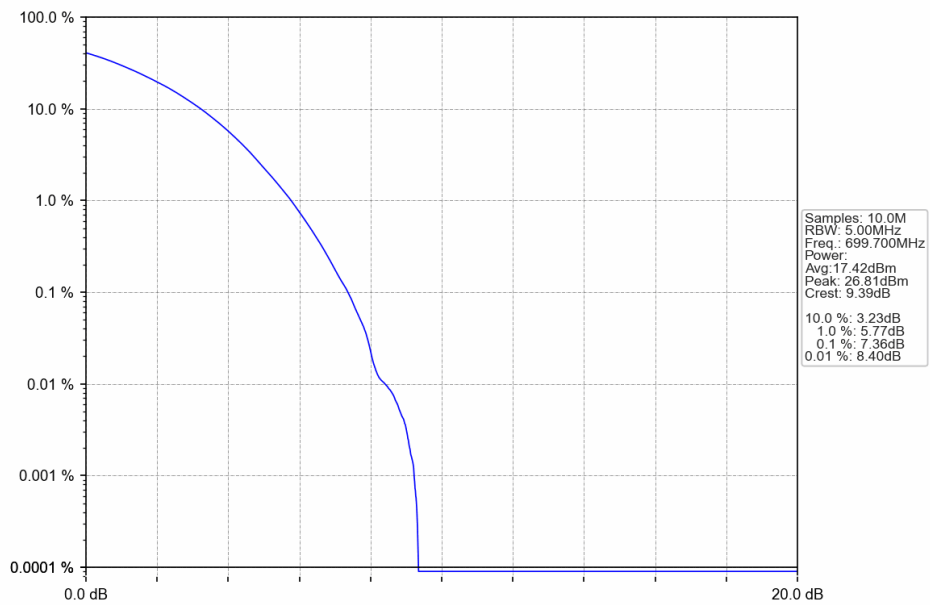
Band12 1.4MHz 64QAM MCH 707.5MHz RB 6 0 NTNV



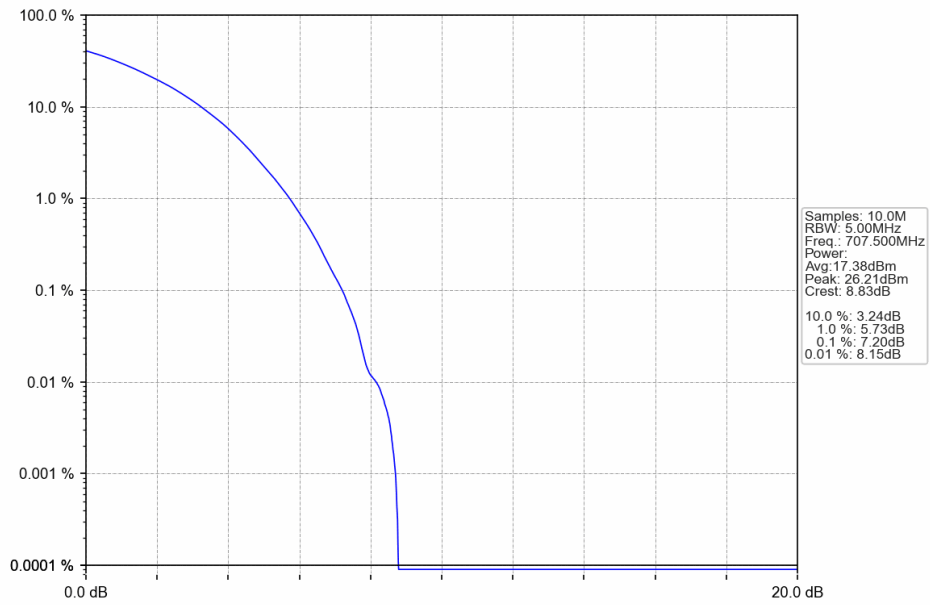
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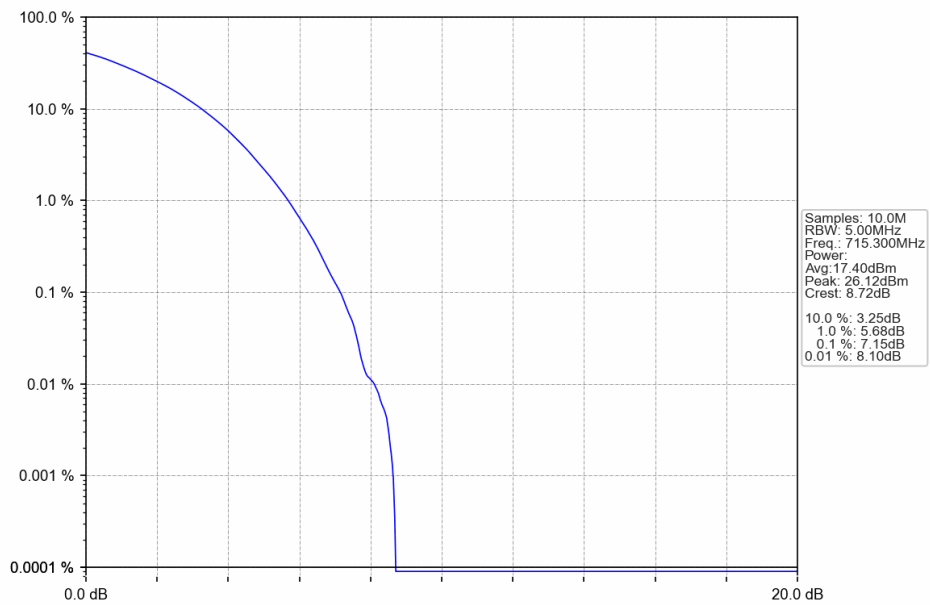
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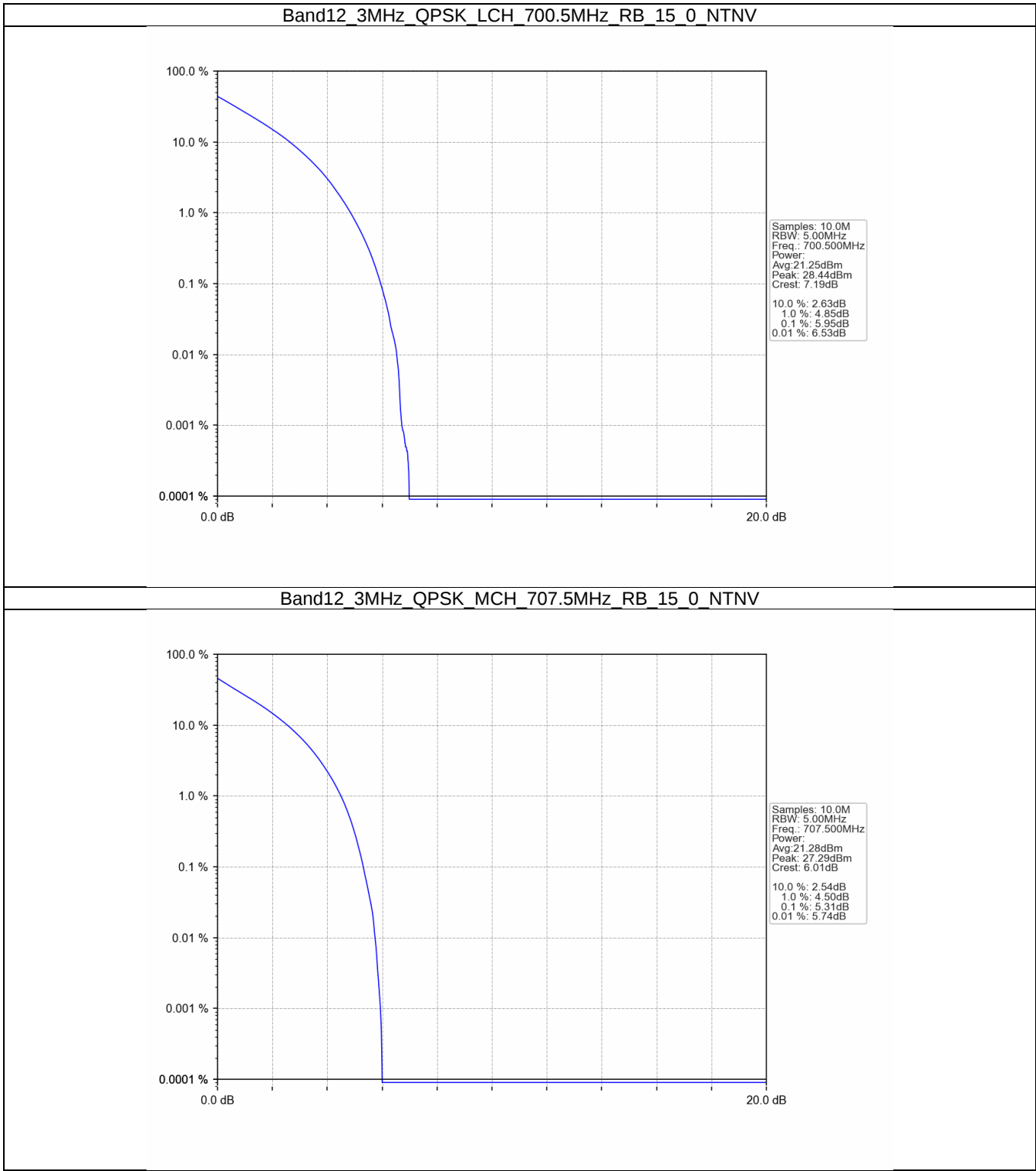
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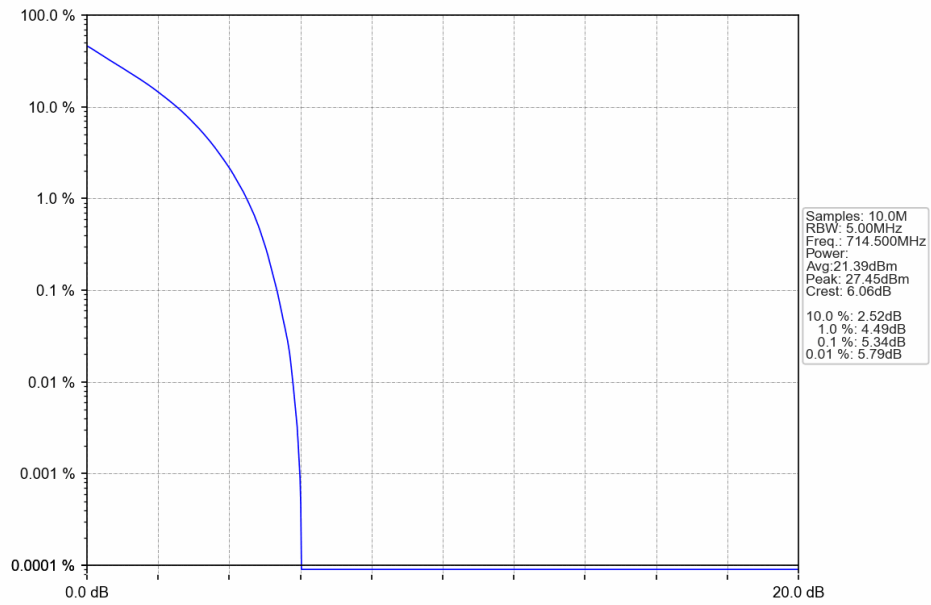
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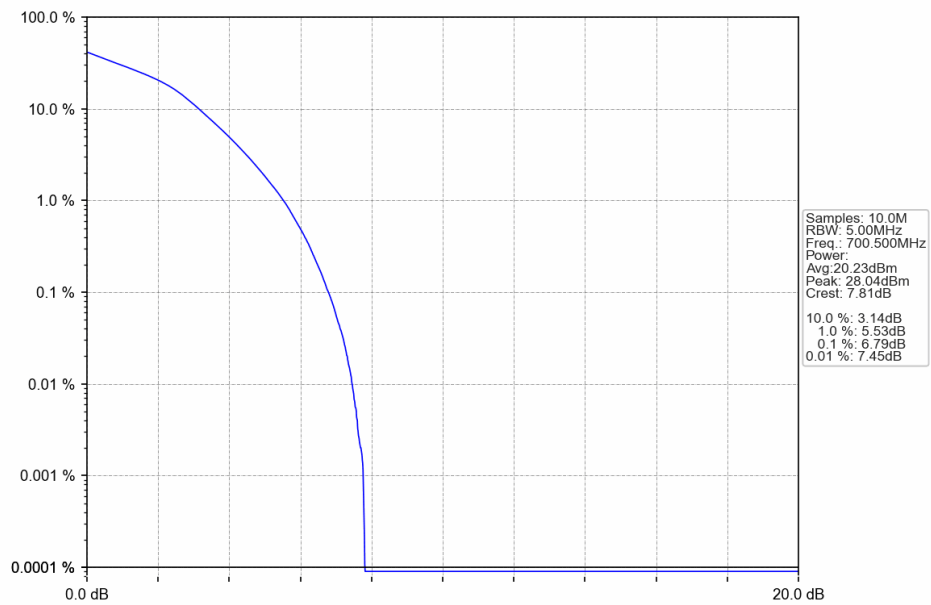
4.2.2 B12_3MHz



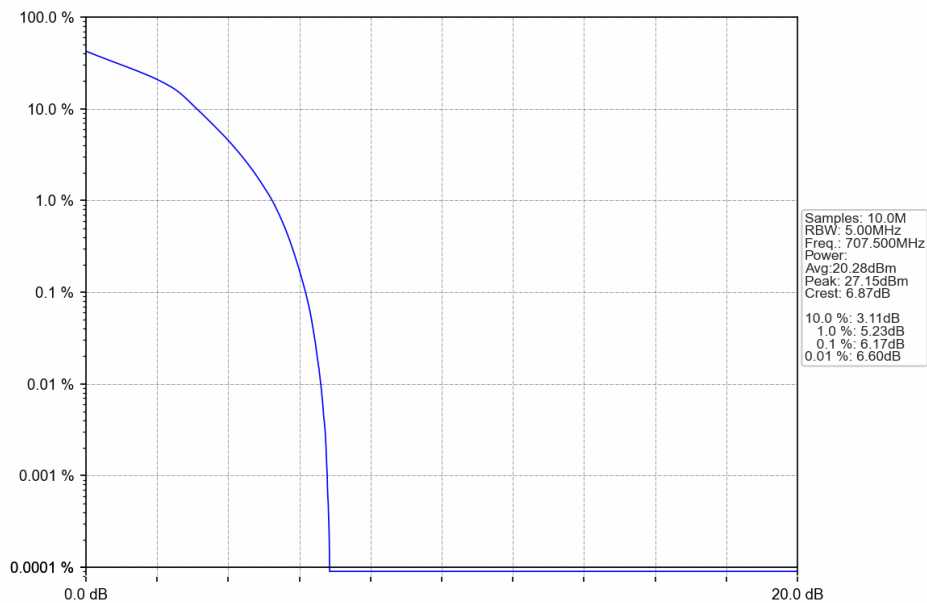
Band12 3MHz QPSK HCH 714.5MHz RB 15 0 NTNV



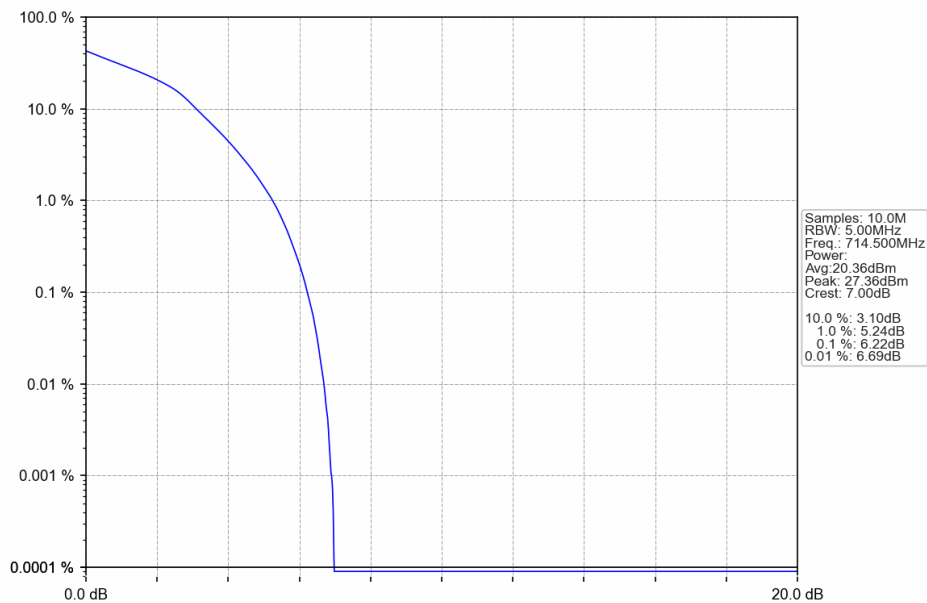
Band12 3MHz 16QAM LCH 700.5MHz RB 15 0 NTNV



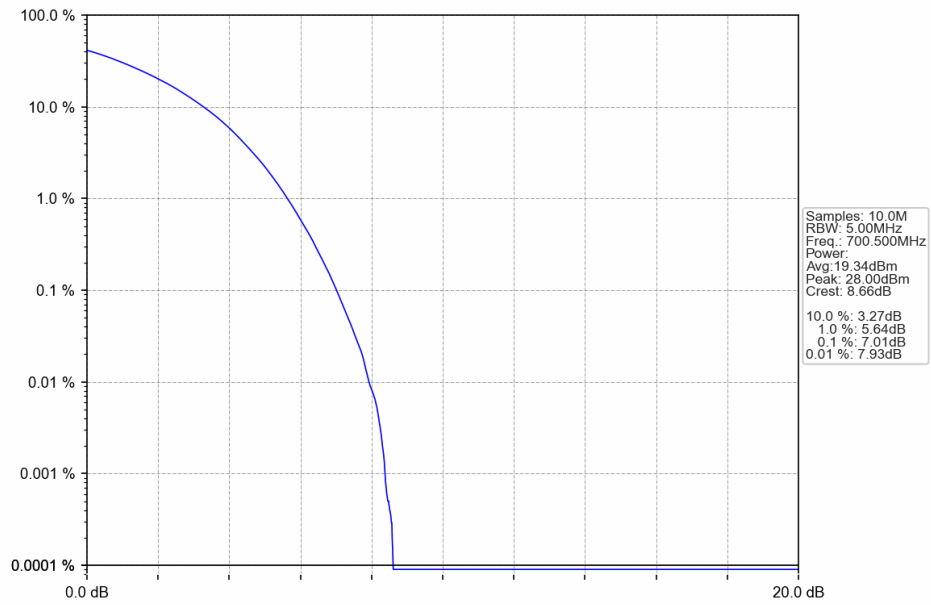
Band12 3MHz 16QAM MCH 707.5MHz RB 15 0 NTV



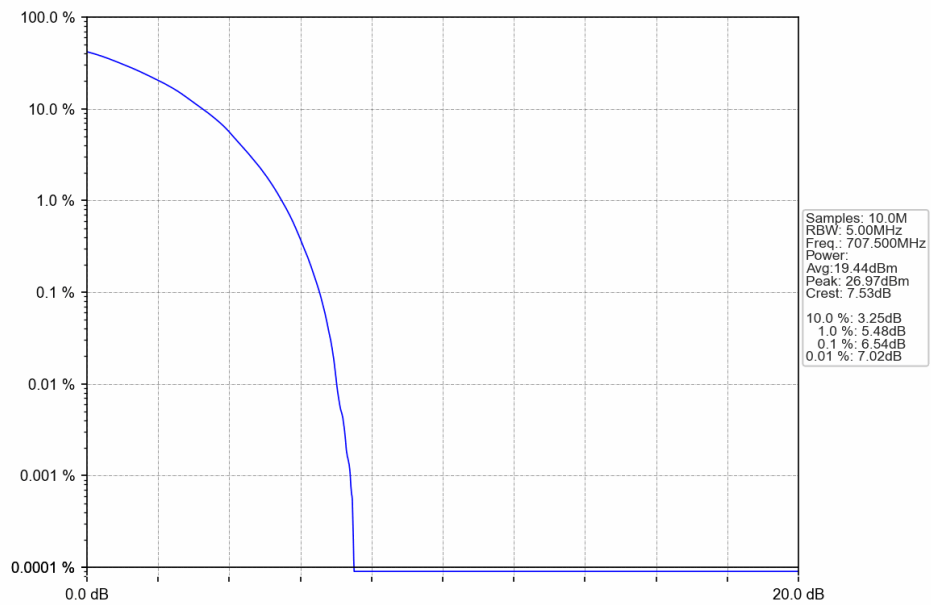
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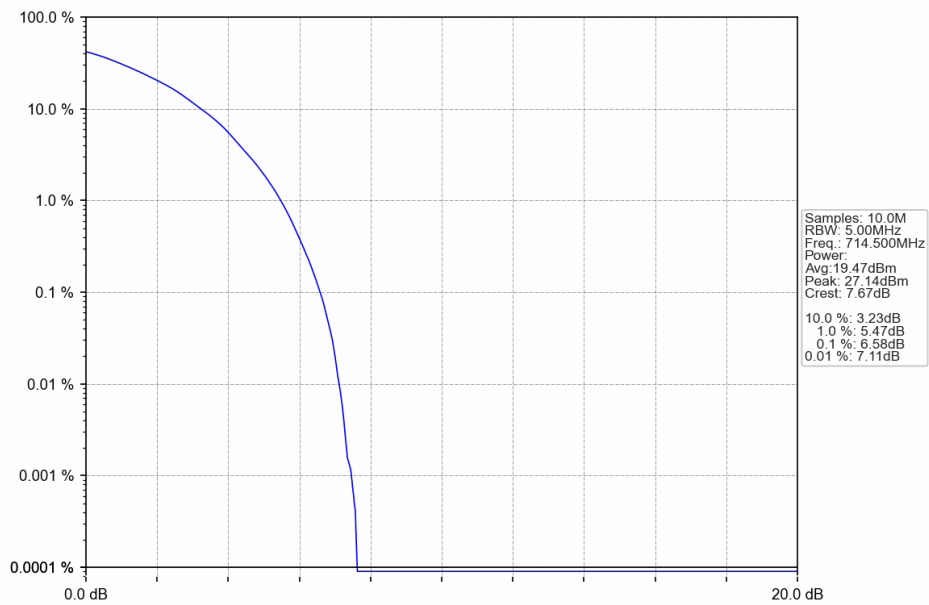
Band12 3MHz 64QAM LCH 700.5MHz RB 15 0 NTNV



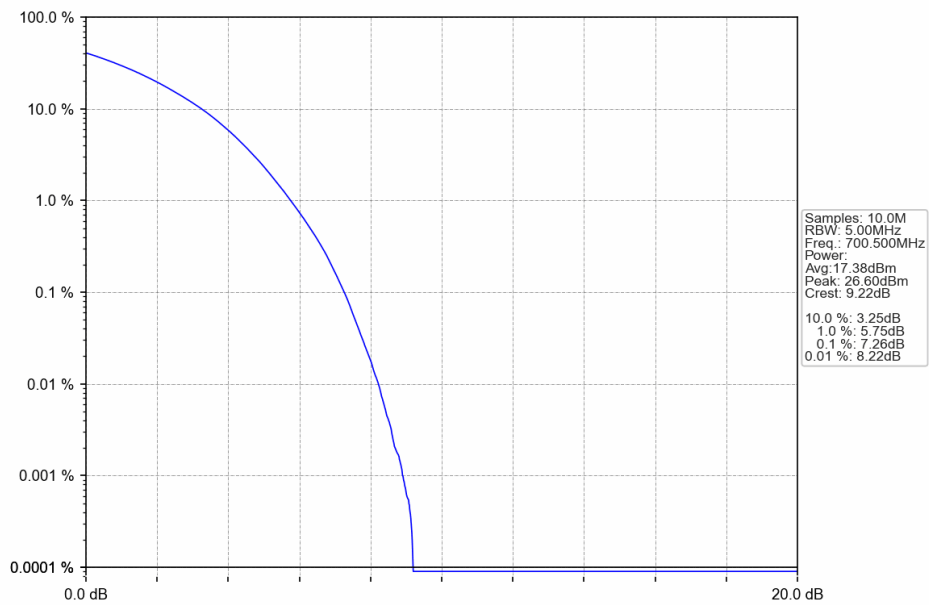
Band12 3MHz 64QAM MCH 707.5MHz RB 15 0 NTNV



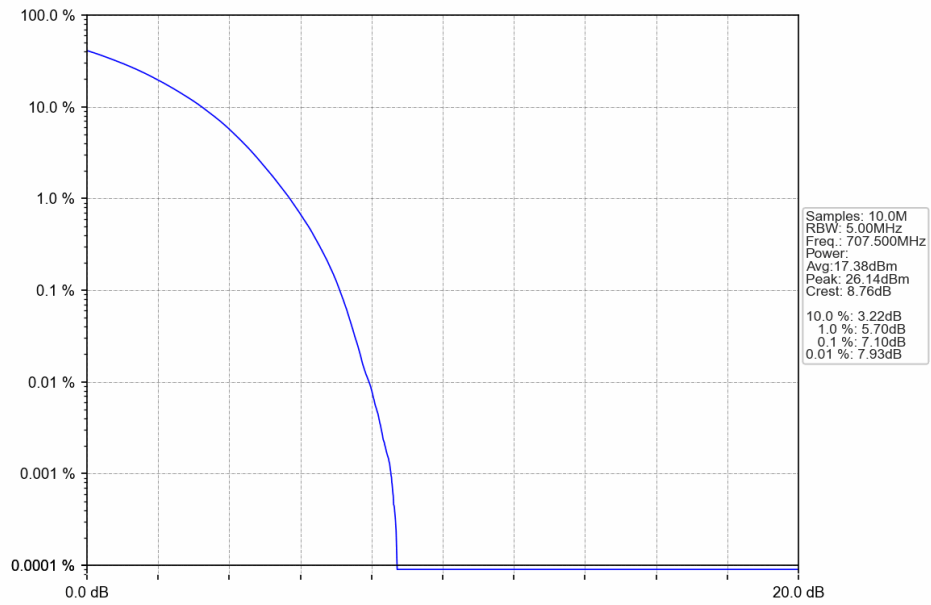
Band12 3MHz 64QAM HCH 714.5MHz RB 15 0 NTNV



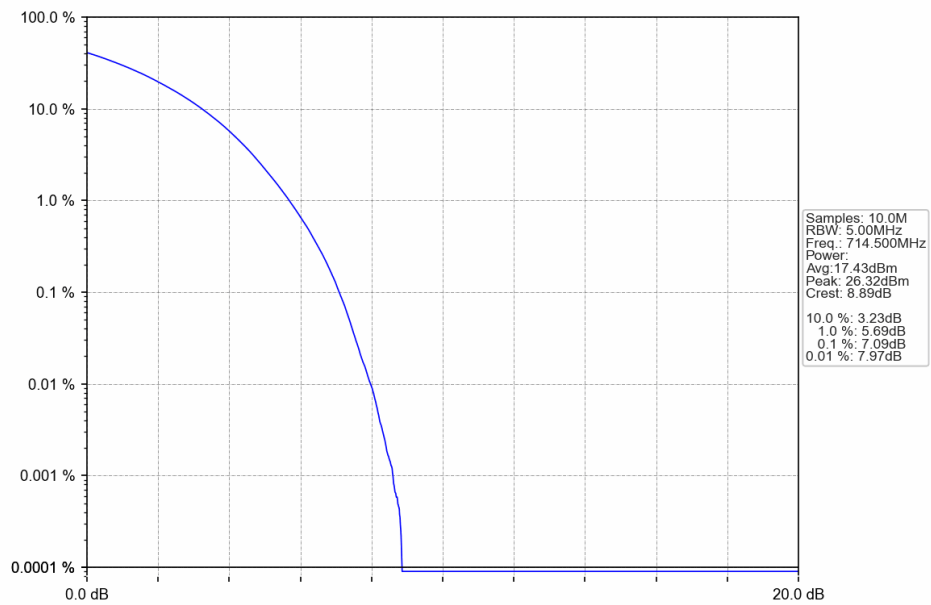
Band12 3MHz 256QAM LCH 700.5MHz RB 15 0 NTNV



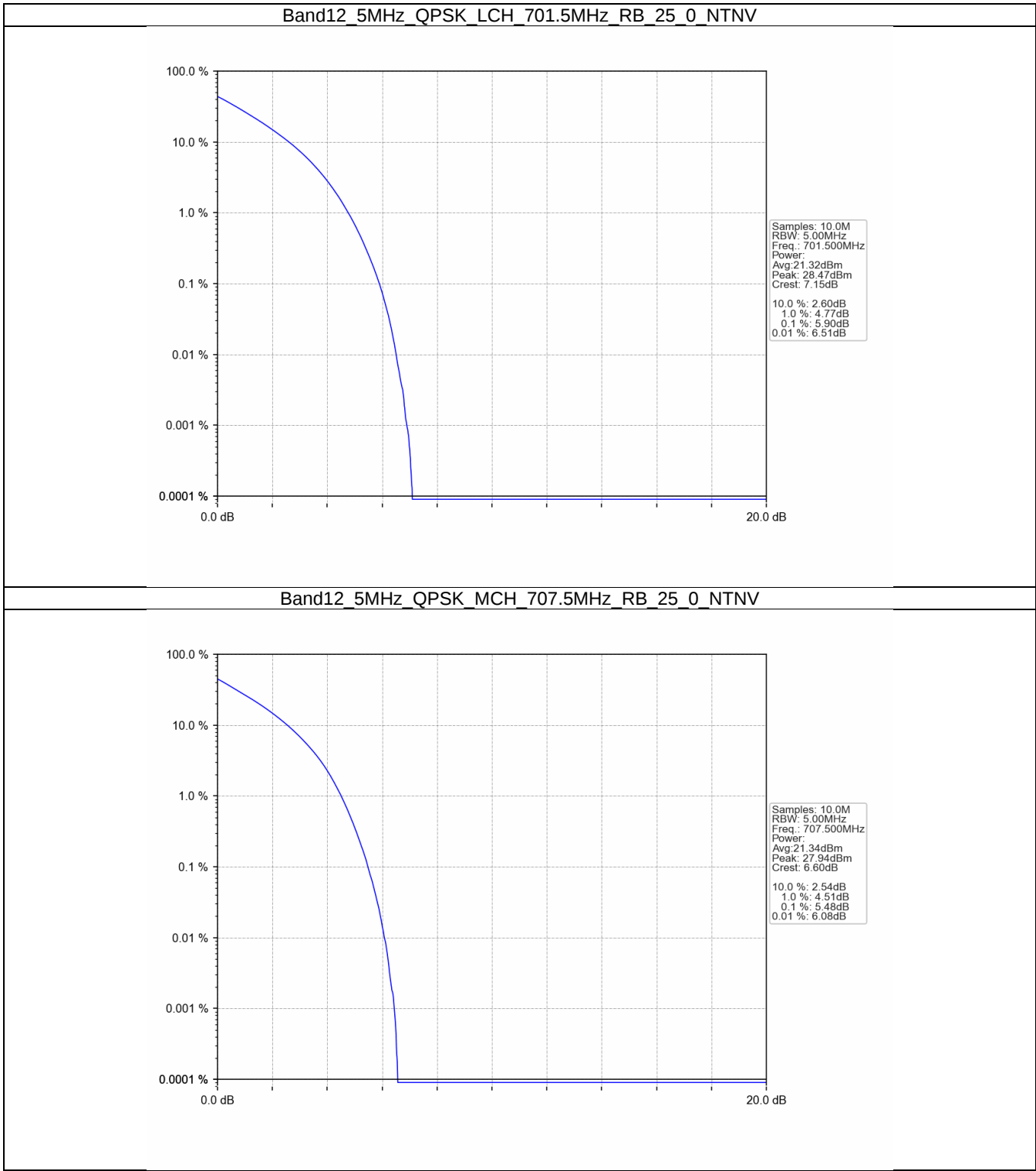
Band12 3MHz 256QAM MCH 707.5MHz RB 15 0 NTNV



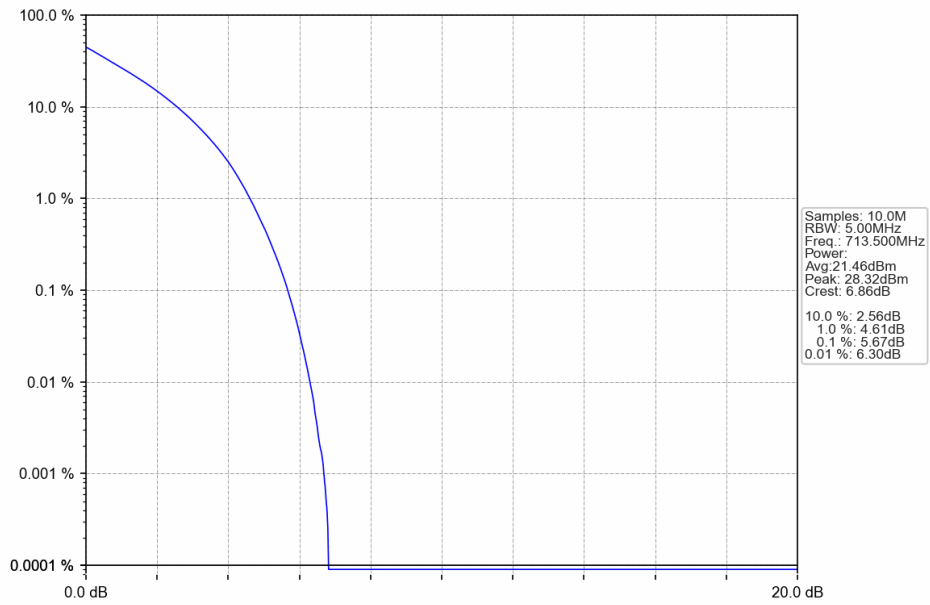
Band12 3MHz 256QAM HCH 714.5MHz RB 15 0 NTNV



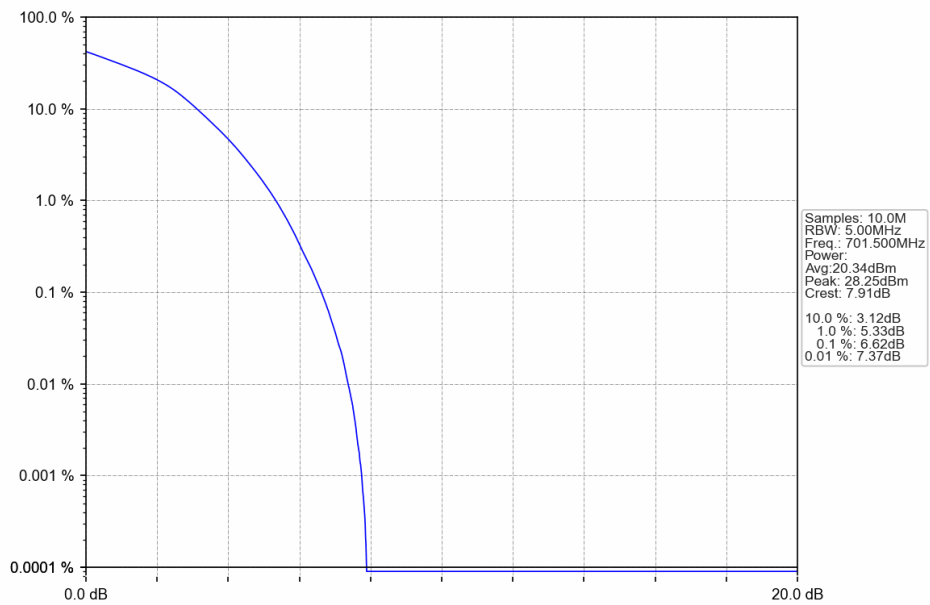
4.2.3 B12_5MHz



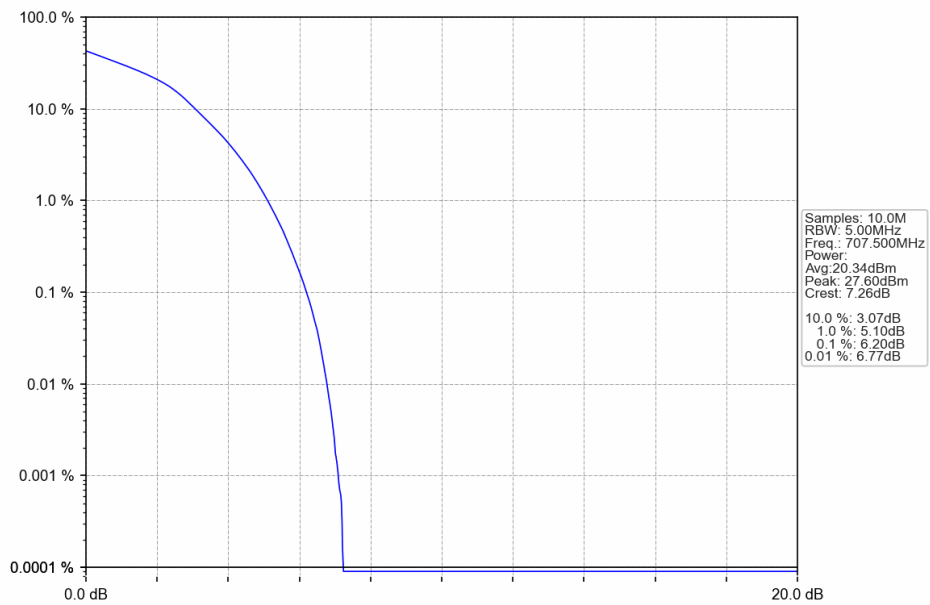
Band12 5MHz QPSK HCH 713.5MHz RB 25 0 NTNV



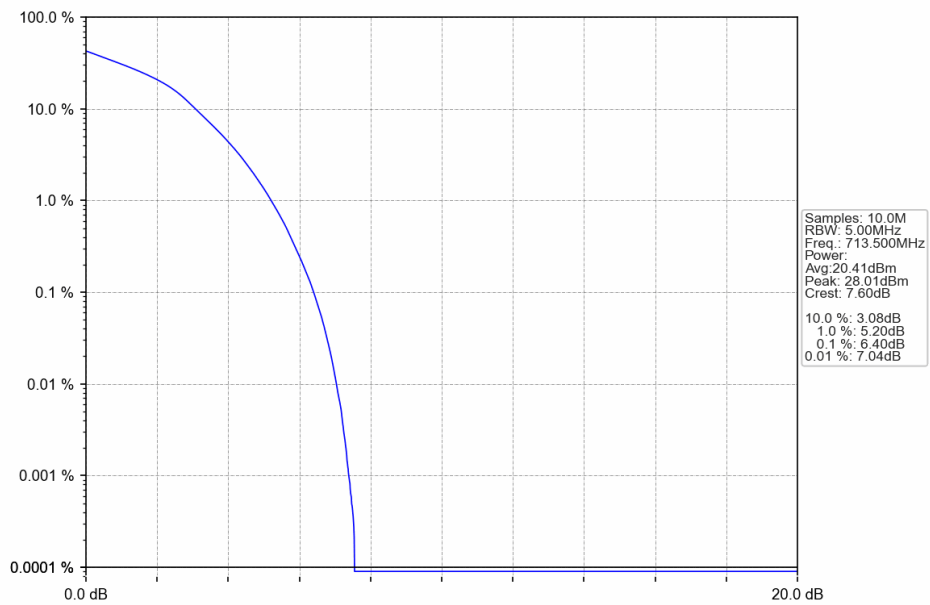
Band12 5MHz 16QAM LCH 701.5MHz RB 25 0 NTNV



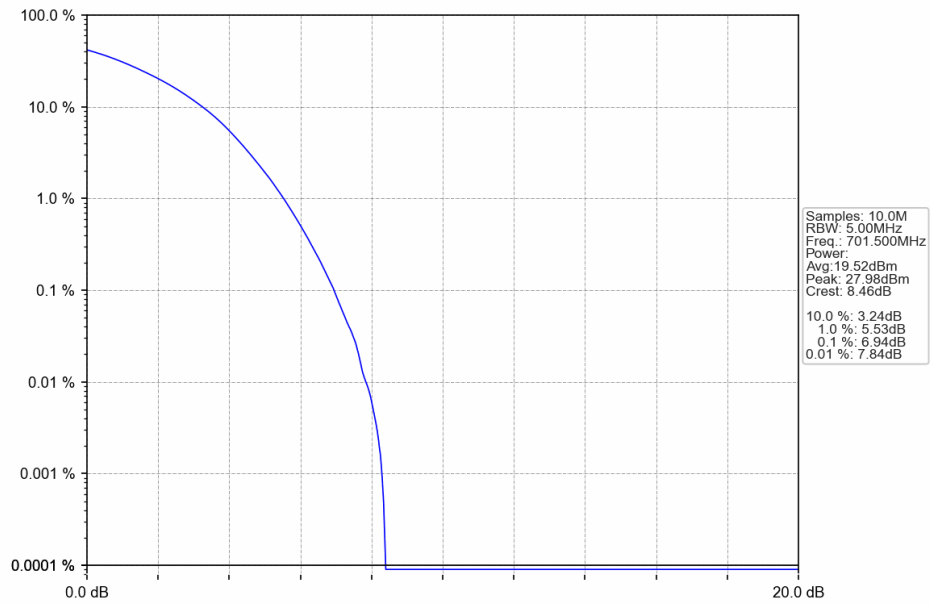
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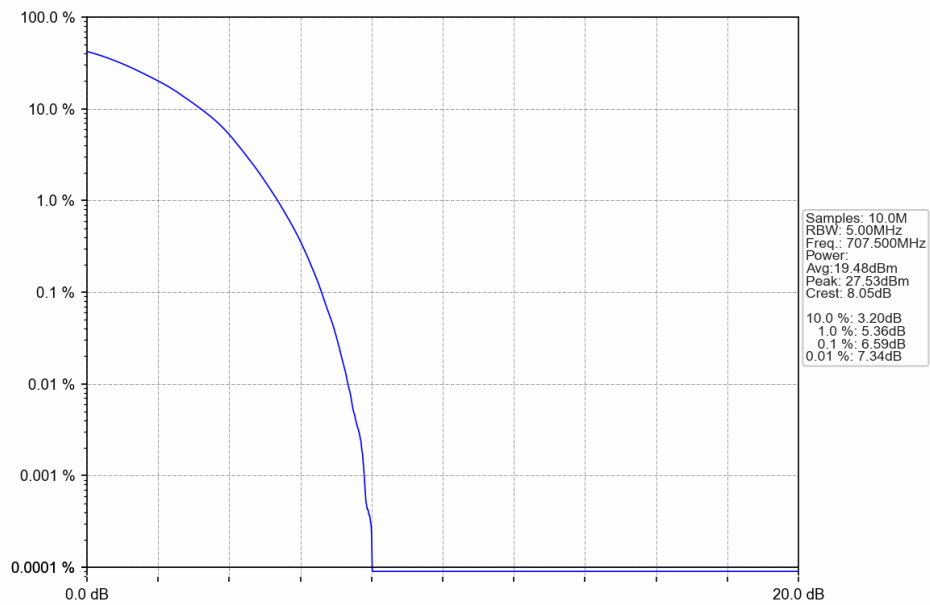
Band12 5MHz 16QAM HCH 713.5MHz RB 25 0 NTV



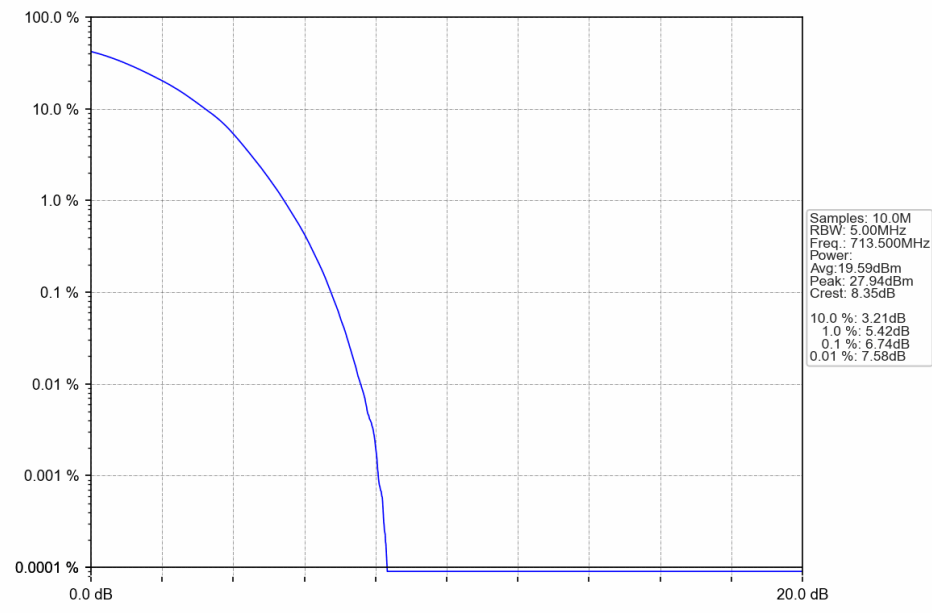
Band12 5MHz 64QAM LCH 701.5MHz RB 25 0 NTNV



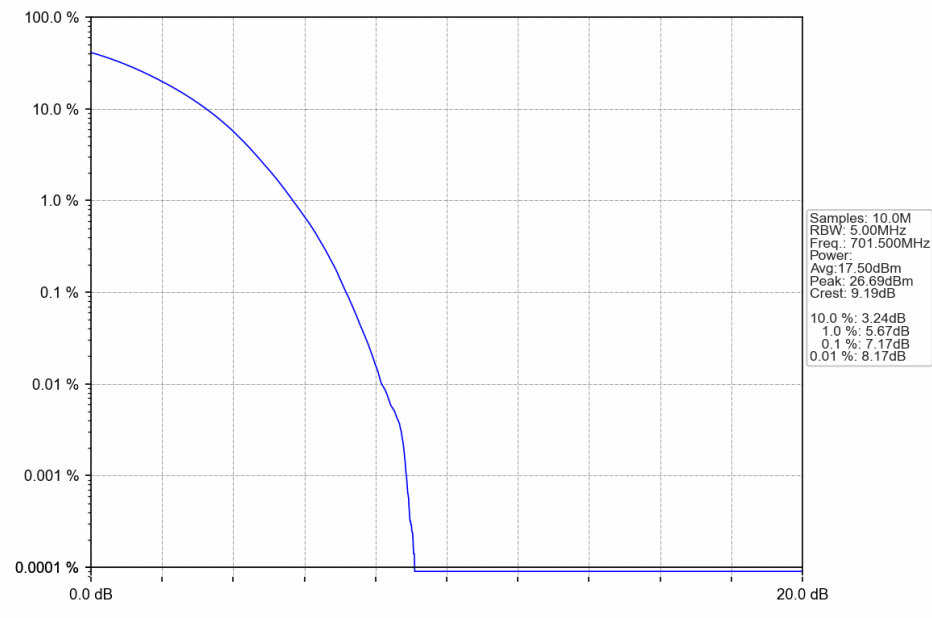
Band12 5MHz 64QAM MCH 707.5MHz RB 25 0 NTNV



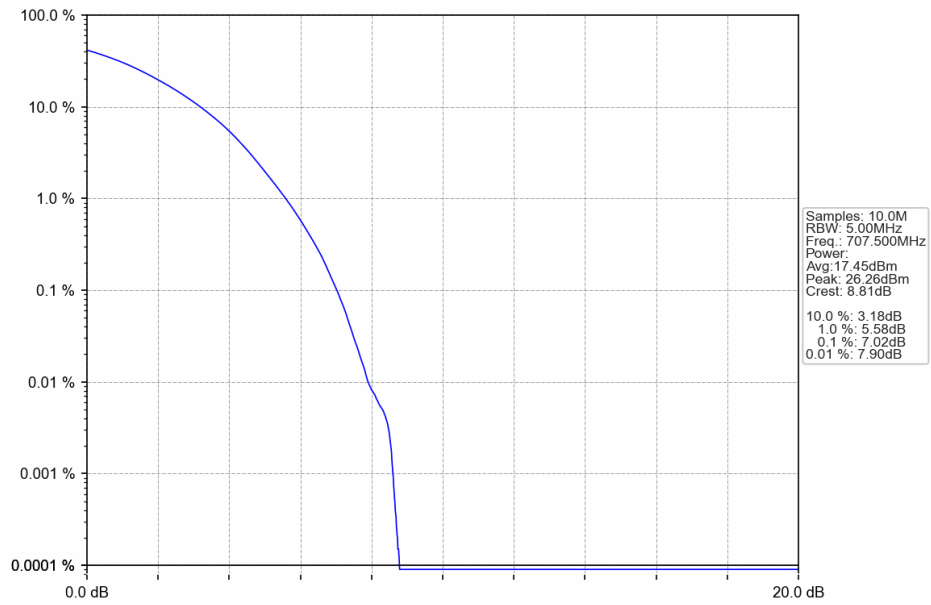
Band12 5MHz 64QAM HCH 713.5MHz RB 25 0 NTNV



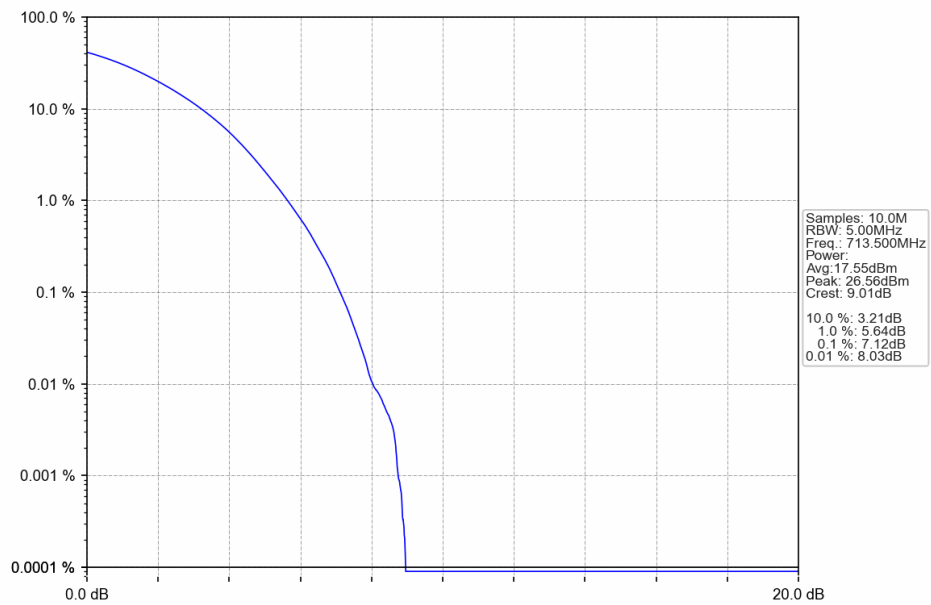
Band12 5MHz 256QAM LCH 701.5MHz RB 25 0 NTNV



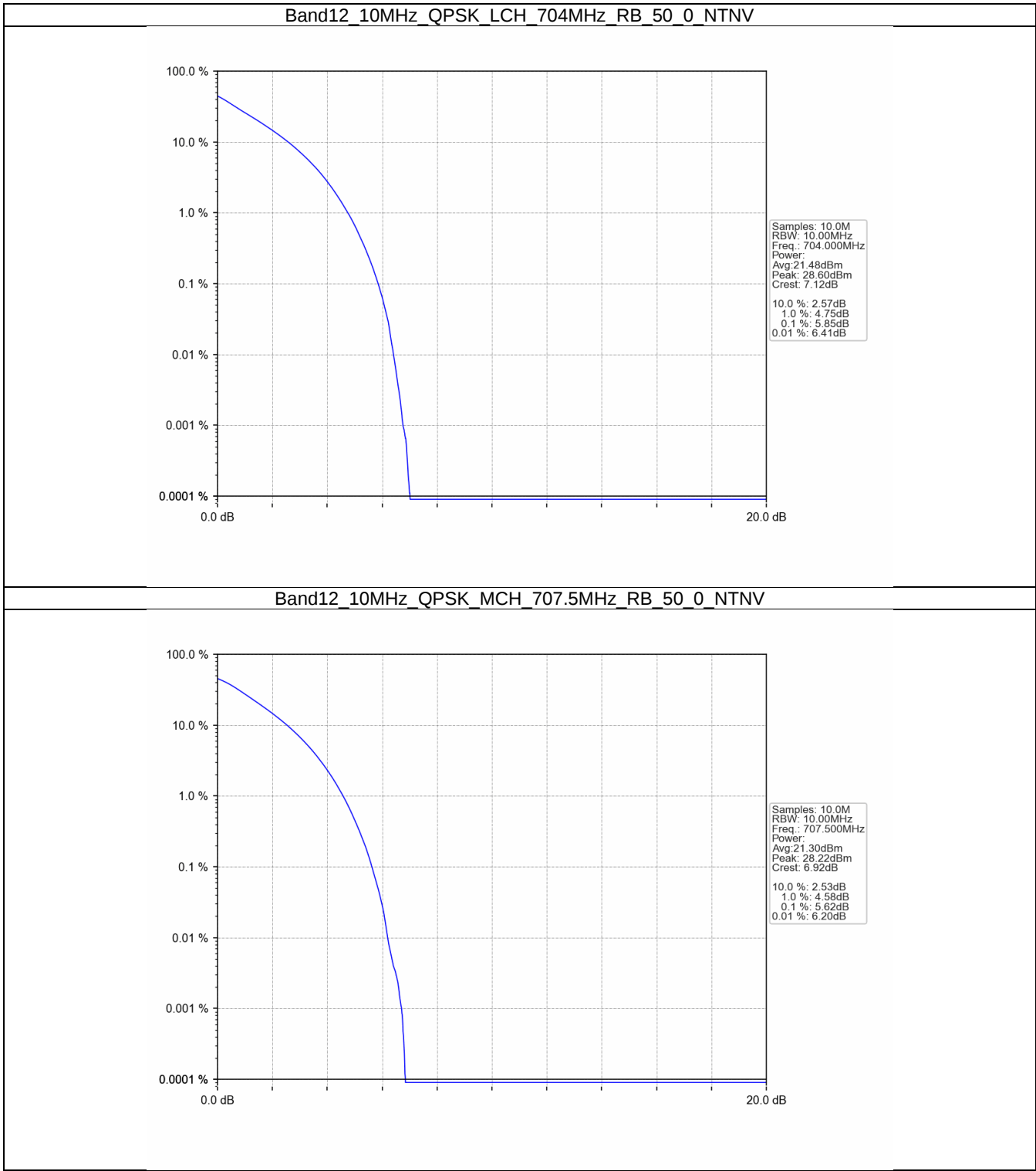
Band12 5MHz 256QAM MCH 707.5MHz RB 25 0 NTNV



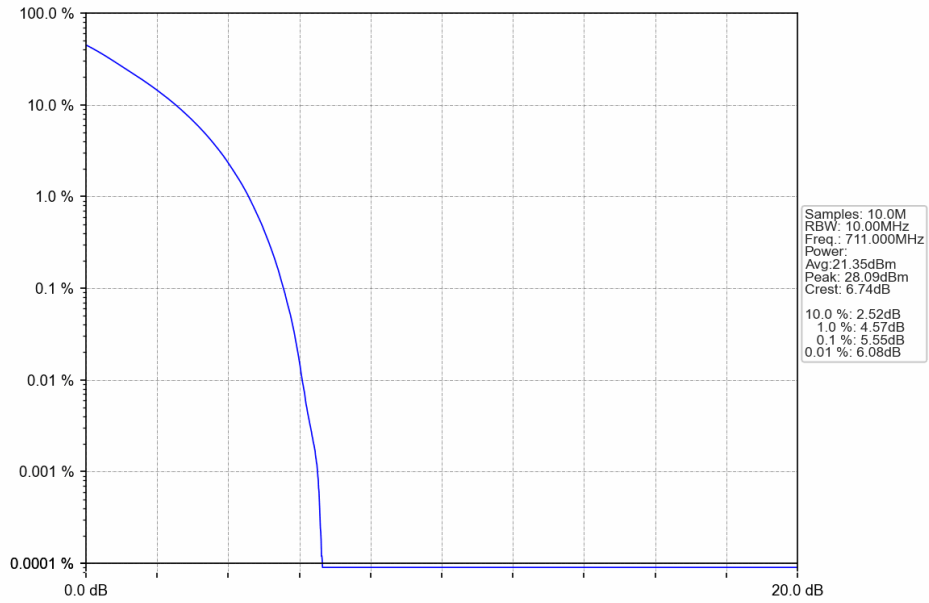
Band12 5MHz 256QAM HCH 713.5MHz RB 25 0 NTNV



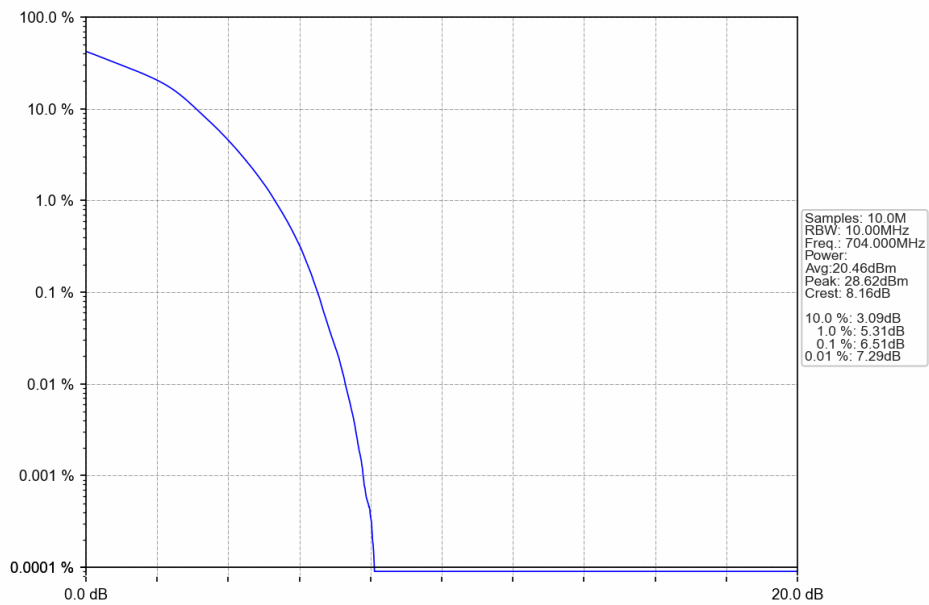
4.2.4 B12_10MHz



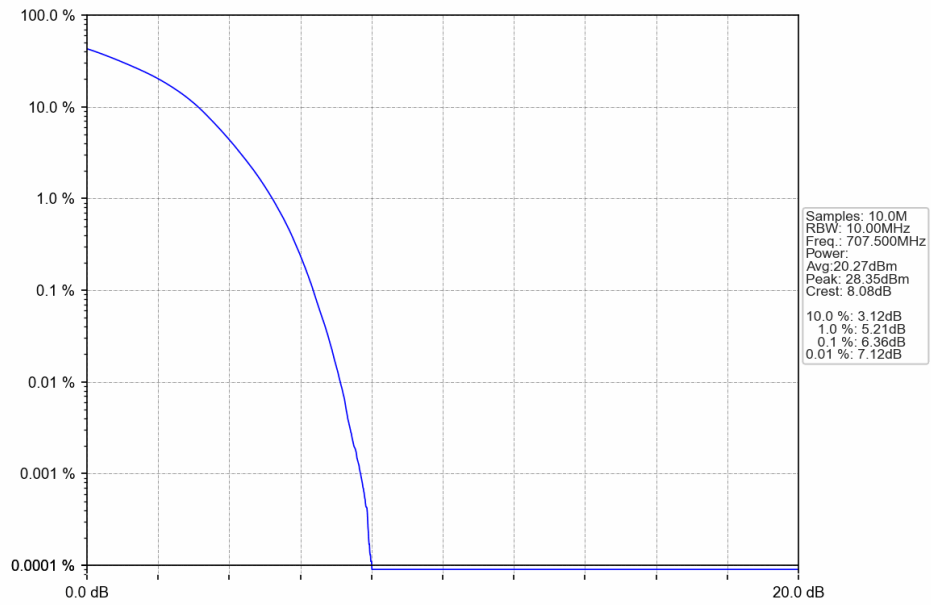
Band12 10MHz QPSK HCH 711MHz RB 50 0 NTNV



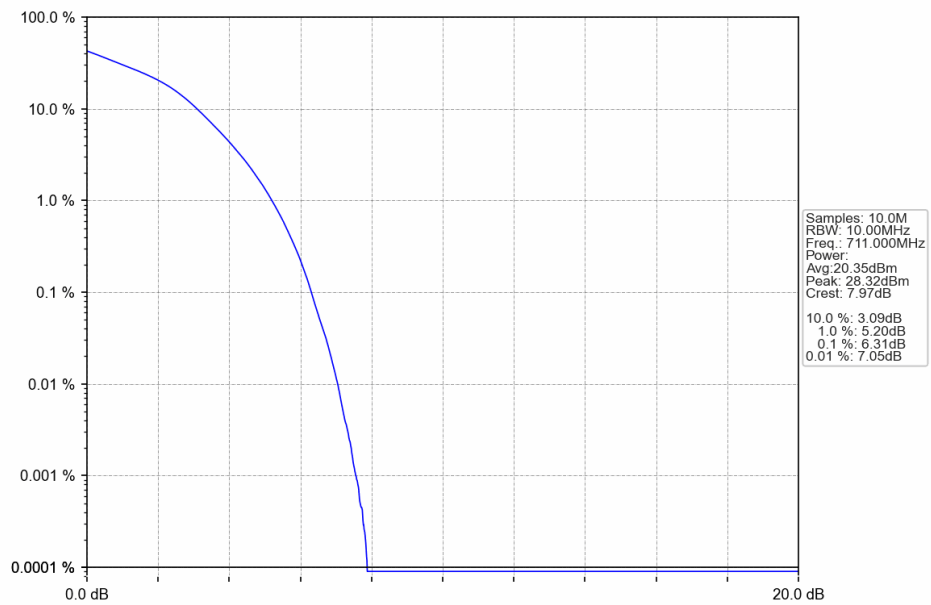
Band12 10MHz 16QAM LCH 704MHz RB 50 0 NTNV



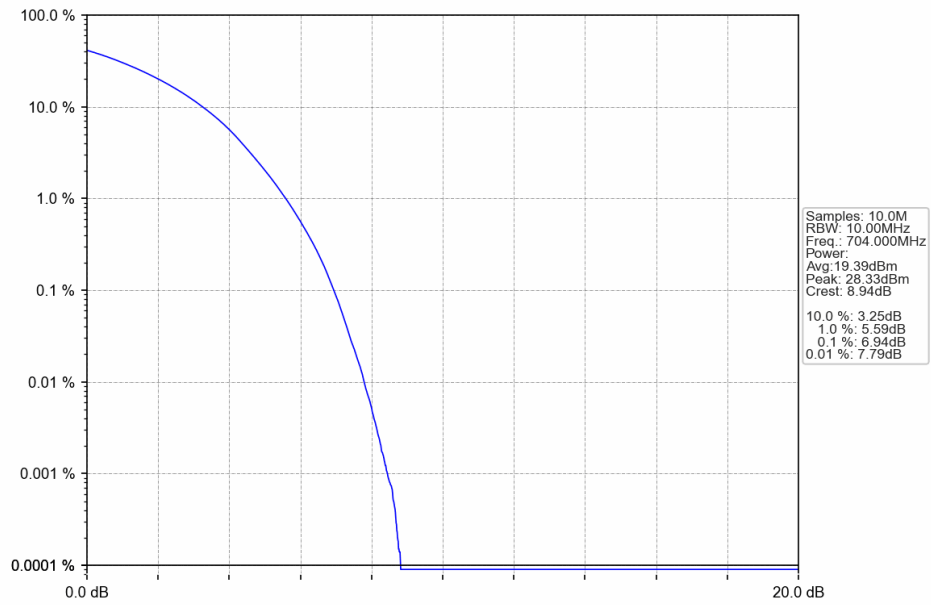
Band12 10MHz 16QAM MCH 707.5MHz RB 50 0 NTNV



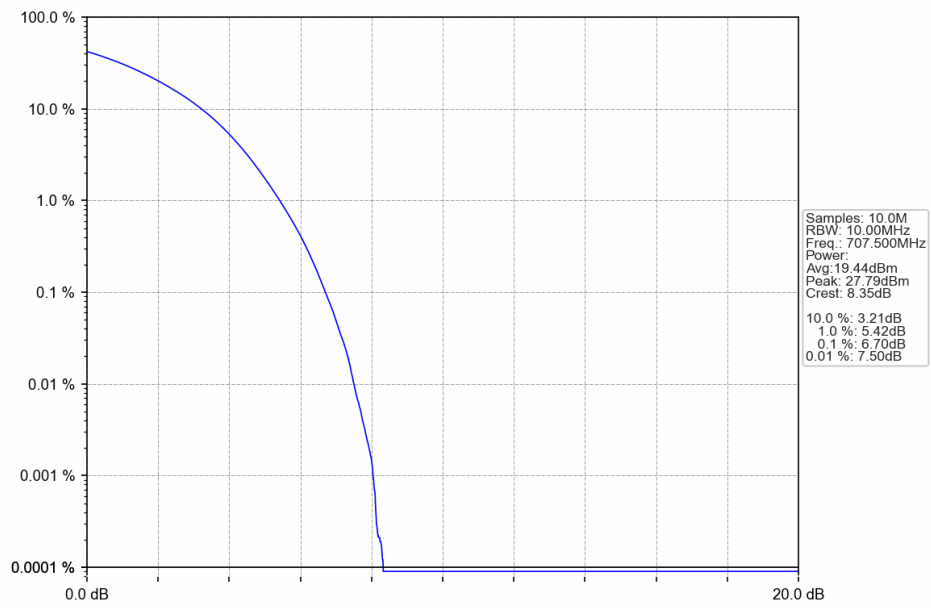
Band12 10MHz 16QAM HCH 711MHz RB 50 0 NTNV



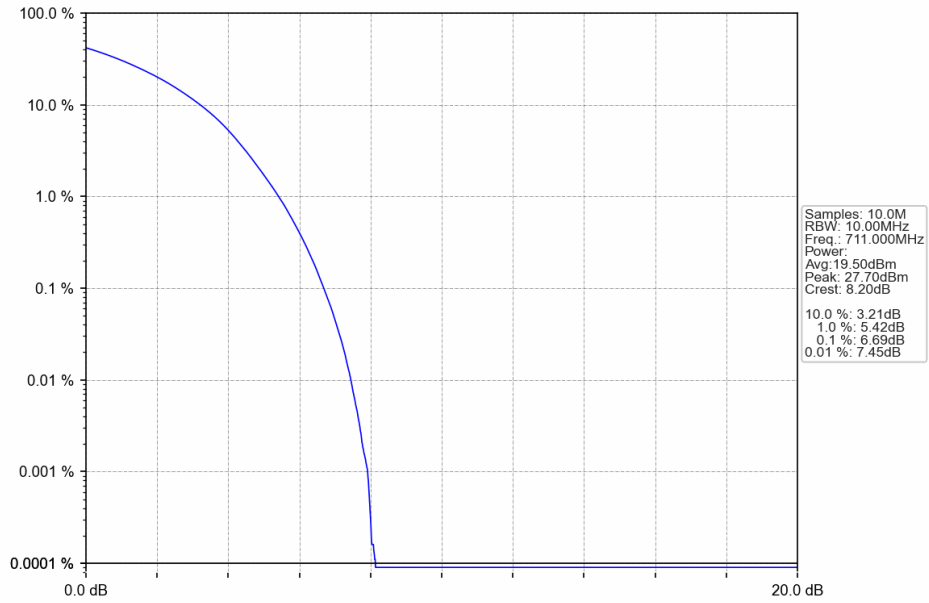
Band12 10MHz 64QAM LCH 704MHz RB 50 0 NTNV



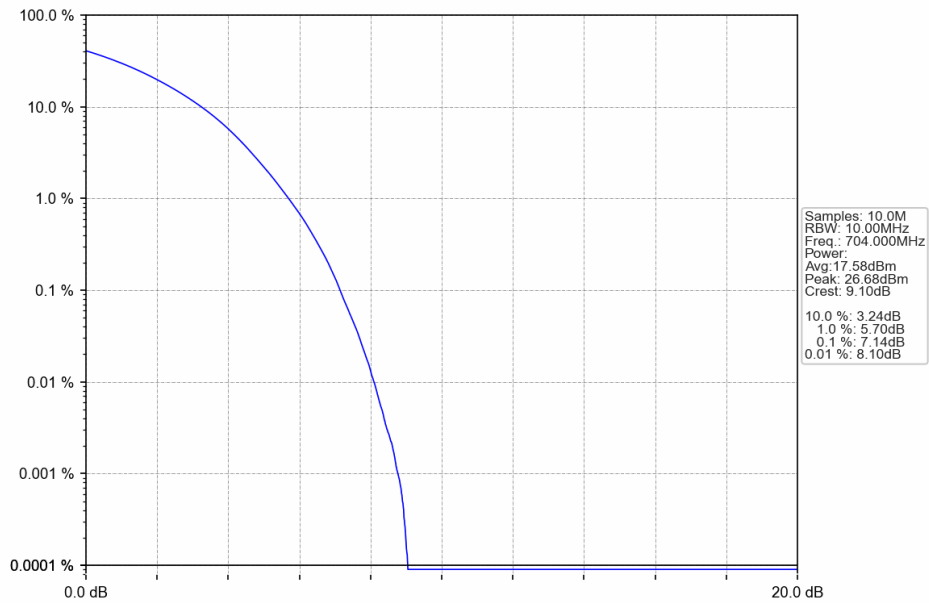
Band12 10MHz 64QAM MCH 707.5MHz RB 50 0 NTNV



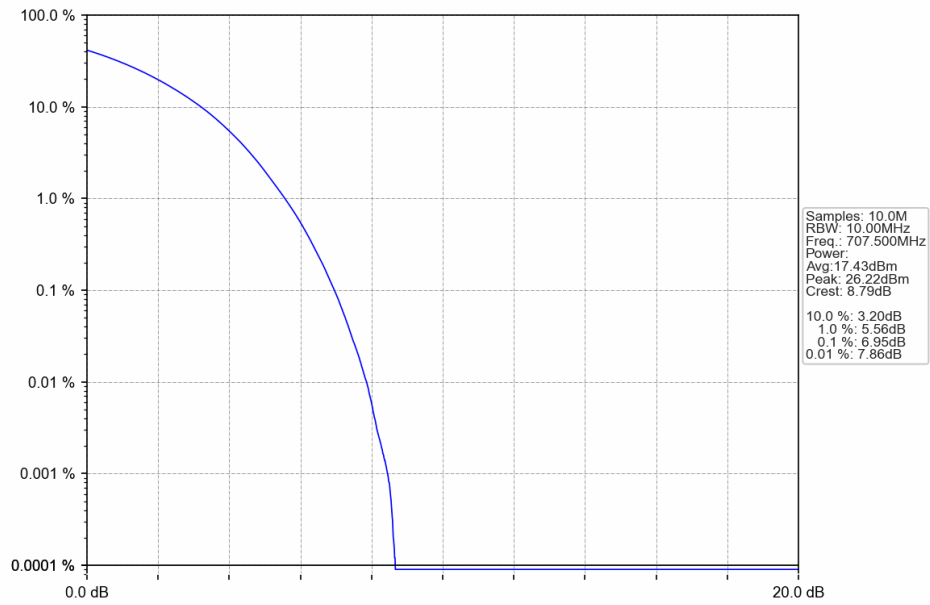
Band12 10MHz 64QAM HCH 711MHz RB 50 0 NTNV



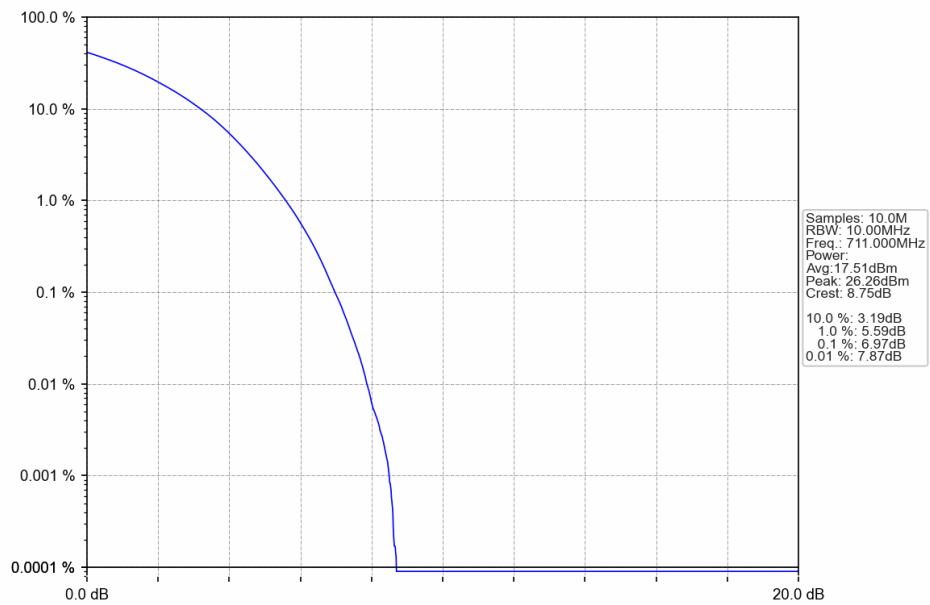
Band12 10MHz 256QAM LCH 704MHz RB 50 0 NTNV



Band12 10MHz 256QAM MCH 707.5MHz RB 50 0 NTNV



Band12 10MHz 256QAM HCH 711MHz RB 50 0 NTNV



5. Spurious Emission

5.1 Test Result

5.1.1 B12_1.4MHz

Band: 12 / Bandwidth: 1.4MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	699.7	1	0	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
	715.3	1	0	Refer To Test Graph		Pass
		1	5	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
16QAM	699.7	1	0	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
	715.3	1	0	Refer To Test Graph		Pass
		1	5	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
64QAM	699.7	1	0	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
	715.3	1	0	Refer To Test Graph		Pass
		1	5	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
256QAM	699.7	1	0	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
	715.3	1	0	Refer To Test Graph		Pass
		1	5	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass

5.1.2 B12_3MHz

Band: 12 / Bandwidth: 3MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	700.5	1	0	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
	714.5	1	0	Refer To Test Graph		Pass
		1	14	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
16QAM	700.5	1	0	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
	714.5	1	0	Refer To Test Graph		Pass
		1	14	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
64QAM	700.5	1	0	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass

256QAM	714.5	1	0	Refer To Test Graph	Pass
			14	Refer To Test Graph	Pass
		15	0	Refer To Test Graph	Pass
	700.5	1	0	Refer To Test Graph	Pass
		15	0	Refer To Test Graph	Pass
	707.5	1	0	Refer To Test Graph	Pass
	714.5	1	0	Refer To Test Graph	Pass
			14	Refer To Test Graph	Pass
		15	0	Refer To Test Graph	Pass

5.1.3 B12_5MHz

Band: 12 / Bandwidth: 5MHz / NTN					
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission	
		Size	Offset	Result	Limit
QPSK	701.5	1	0	Refer To Test Graph	Pass
		25	0	Refer To Test Graph	Pass
	707.5	1	0	Refer To Test Graph	Pass
	713.5	1	0	Refer To Test Graph	Pass
			24	Refer To Test Graph	Pass
		25	0	Refer To Test Graph	Pass
16QAM	701.5	1	0	Refer To Test Graph	Pass
		25	0	Refer To Test Graph	Pass
	707.5	1	0	Refer To Test Graph	Pass
	713.5	1	0	Refer To Test Graph	Pass
			24	Refer To Test Graph	Pass
		25	0	Refer To Test Graph	Pass
64QAM	701.5	1	0	Refer To Test Graph	Pass
		25	0	Refer To Test Graph	Pass
	707.5	1	0	Refer To Test Graph	Pass
	713.5	1	0	Refer To Test Graph	Pass
			24	Refer To Test Graph	Pass
		25	0	Refer To Test Graph	Pass
256QAM	701.5	1	0	Refer To Test Graph	Pass
		25	0	Refer To Test Graph	Pass
	707.5	1	0	Refer To Test Graph	Pass
	713.5	1	0	Refer To Test Graph	Pass
			24	Refer To Test Graph	Pass
		25	0	Refer To Test Graph	Pass

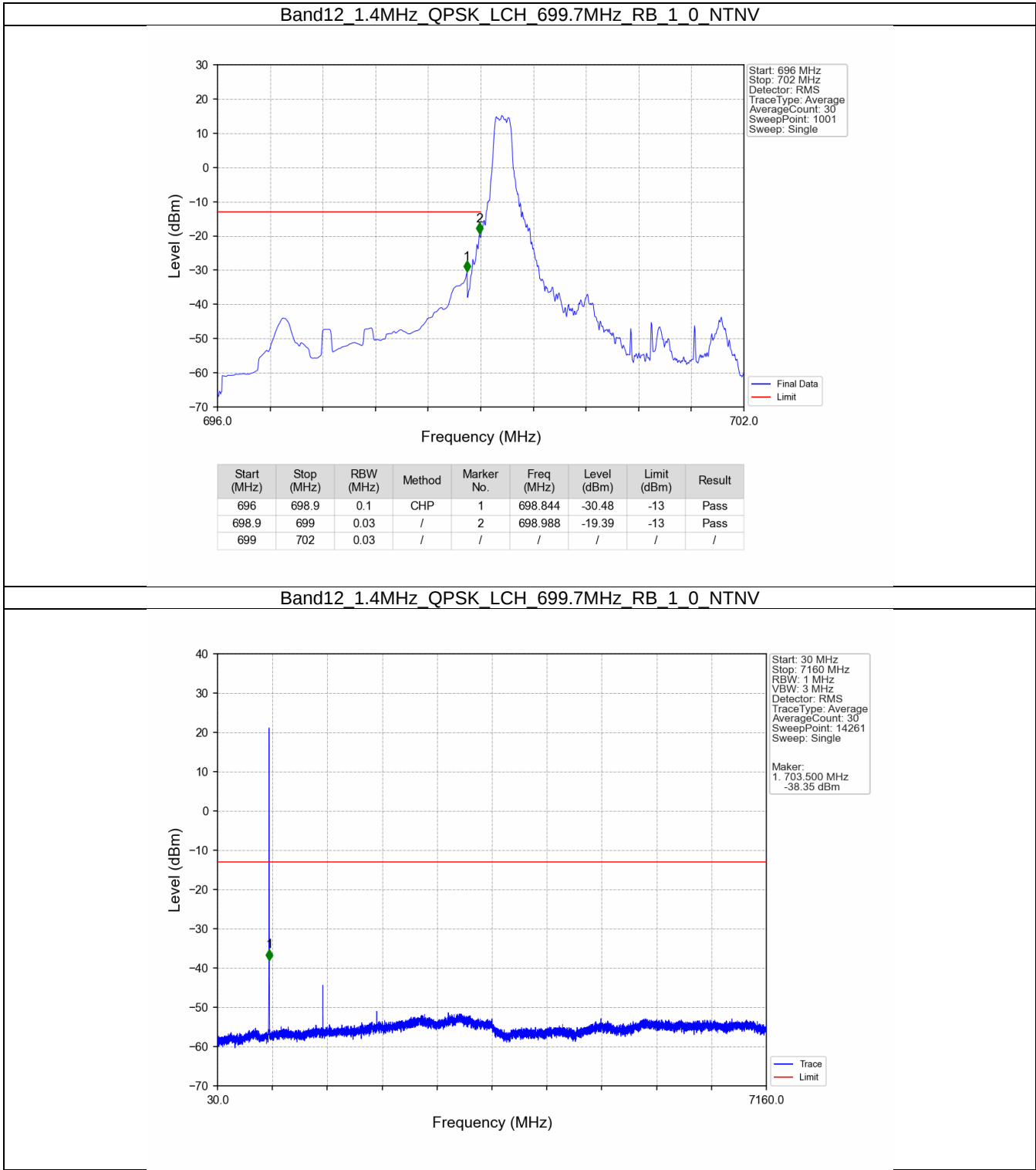
5.1.4 B12_10MHz

Band: 12 / Bandwidth: 10MHz / NTN					
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission	
		Size	Offset	Result	Limit
QPSK	704	1	0	Refer To Test Graph	Pass
		50	0	Refer To Test Graph	Pass
	707.5	1	0	Refer To Test Graph	Pass
		1	0	Refer To Test Graph	Pass
			49	Refer To Test Graph	Pass
		50	0	Refer To Test Graph	Pass
16QAM	704	1	0	Refer To Test Graph	Pass
		50	0	Refer To Test Graph	Pass
	707.5	1	0	Refer To Test Graph	Pass
		1	0	Refer To Test Graph	Pass
			49	Refer To Test Graph	Pass
		50	0	Refer To Test Graph	Pass

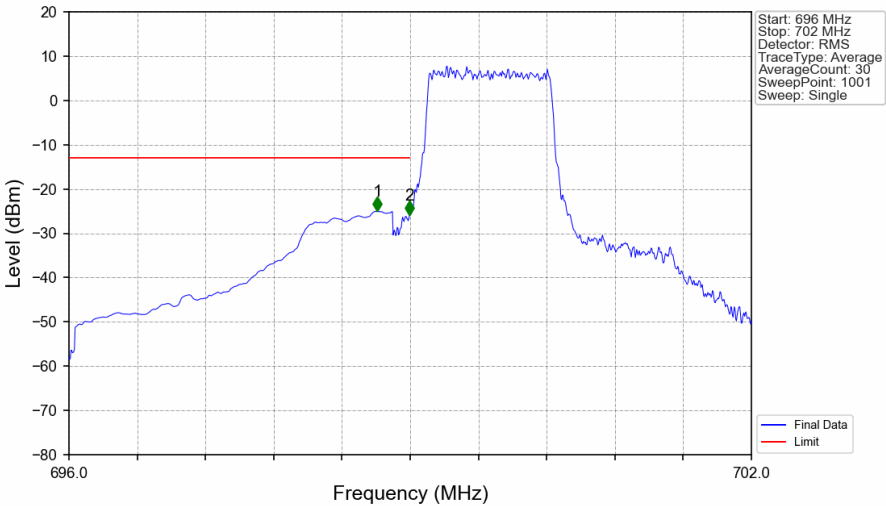
		50	0	Refer To Test Graph	Pass
64QAM	704	1	0	Refer To Test Graph	Pass
		50	0	Refer To Test Graph	Pass
	707.5	1	0	Refer To Test Graph	Pass
	711	1	0	Refer To Test Graph	Pass
			49	Refer To Test Graph	Pass
		50	0	Refer To Test Graph	Pass
256QAM	704	1	0	Refer To Test Graph	Pass
		50	0	Refer To Test Graph	Pass
	707.5	1	0	Refer To Test Graph	Pass
	711	1	0	Refer To Test Graph	Pass
			49	Refer To Test Graph	Pass
		50	0	Refer To Test Graph	Pass

5.2 Test Graph

5.2.1 B12_1.4MHz

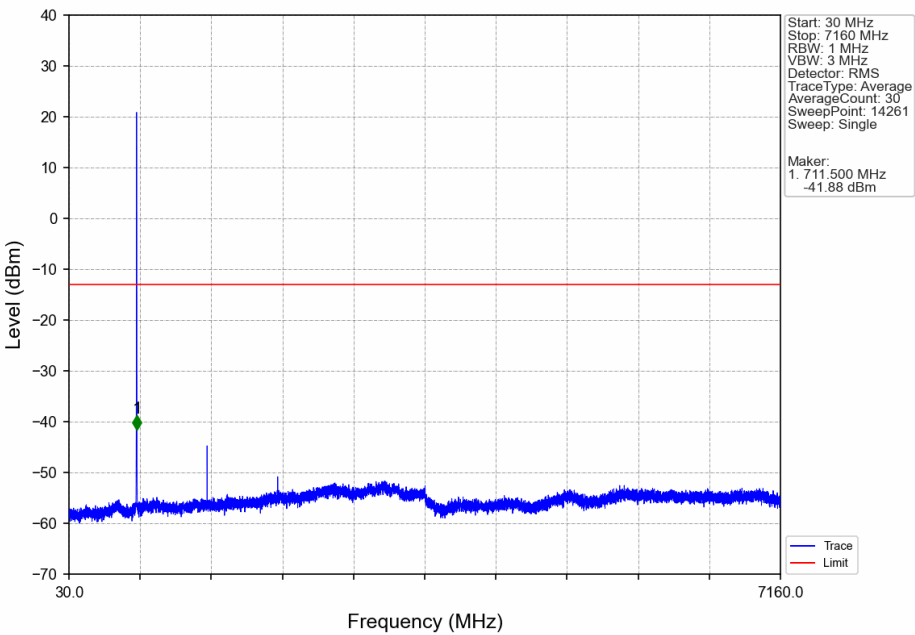


Band12 1.4MHz QPSK LCH 699.7MHz RB 6 0 NTNV

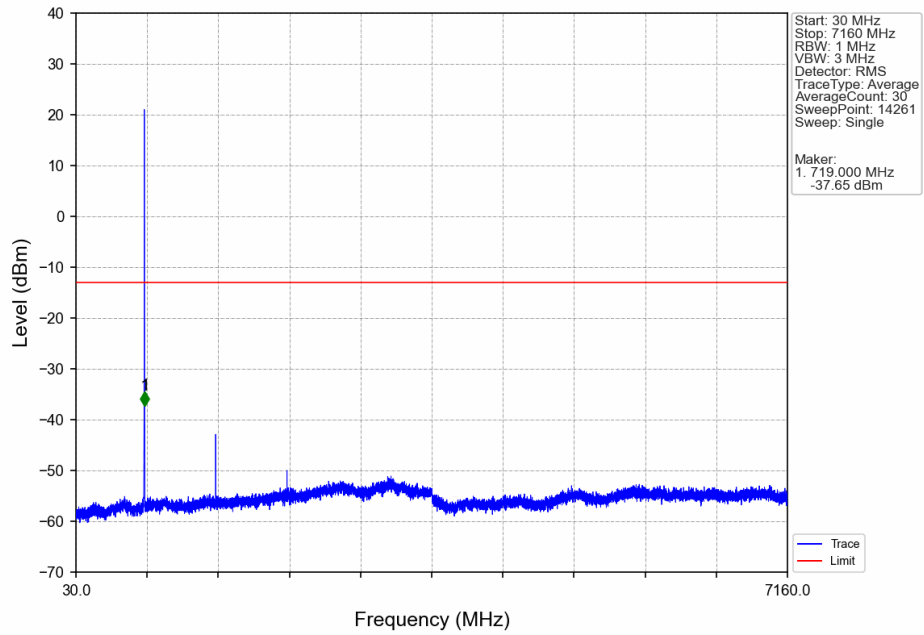


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.712	-25.01	-13	Pass
698.9	699	0.03	/	2	698.994	-25.85	-13	Pass
699	702	0.03	/	/	/	/	/	/

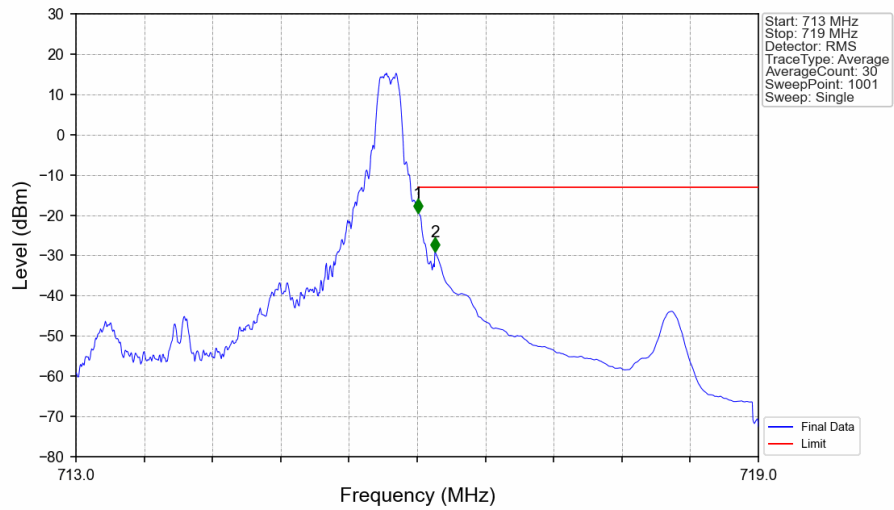
Band12 1.4MHz QPSK MCH 707.5MHz RB 1 0 NTNV



Band12 1.4MHz QPSK HCH 715.3MHz RB 1 0 NTNV

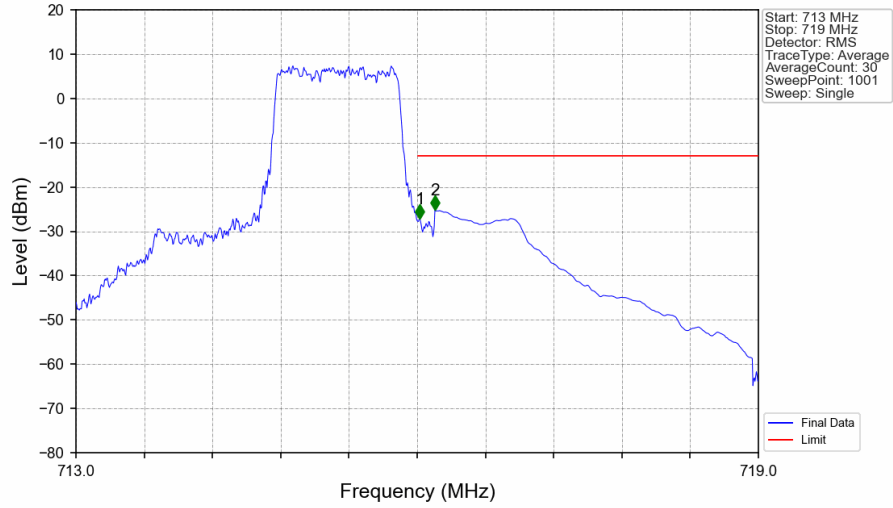


Band12 1.4MHz QPSK HCH 715.3MHz RB 1 5 NTNV



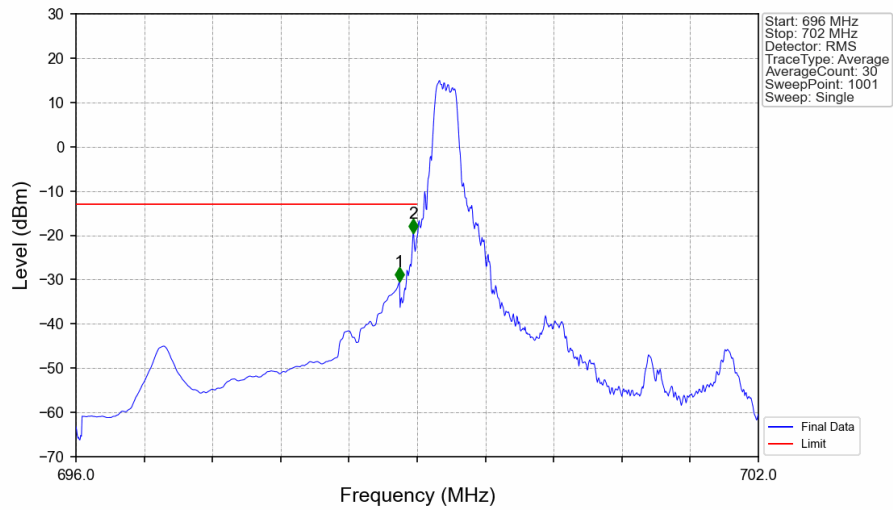
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.006	-19.52	-13	Pass
716.1	719	0.1	CHP	2	716.156	-29.05	-13	Pass

Band12 1.4MHz QPSK HCH 715.3MHz RB 6 0 NTV



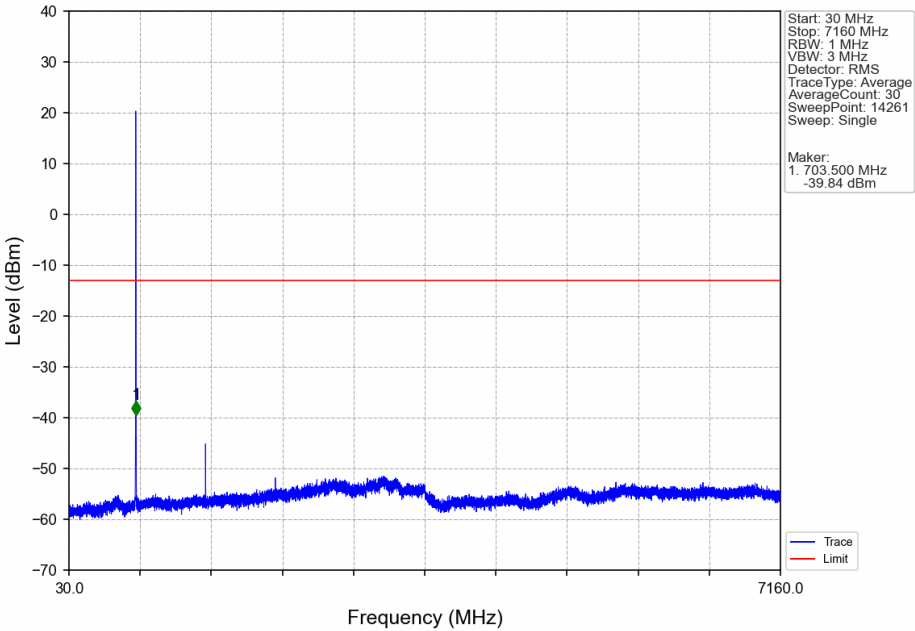
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.024	-27.14	-13	Pass
716.1	719	0.1	CHP	2	716.156	-25.20	-13	Pass

Band12 1.4MHz 16QAM LCH 699.7MHz RB 1 0 NTV

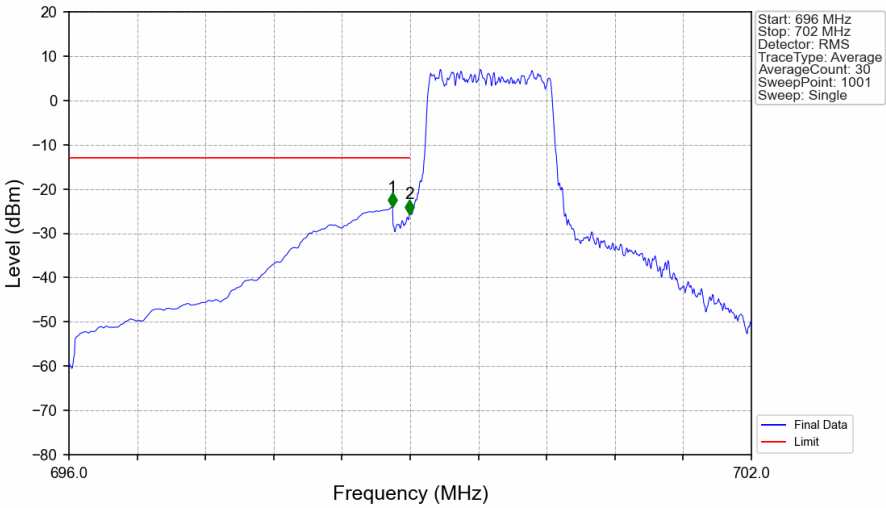


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.844	-30.50	-13	Pass
698.9	699	0.03	/	2	698.964	-19.40	-13	Pass
699	702	0.03	/	/	/	/	/	/

Band12 1.4MHz 16QAM LCH 699.7MHz RB 1 0 NTNV

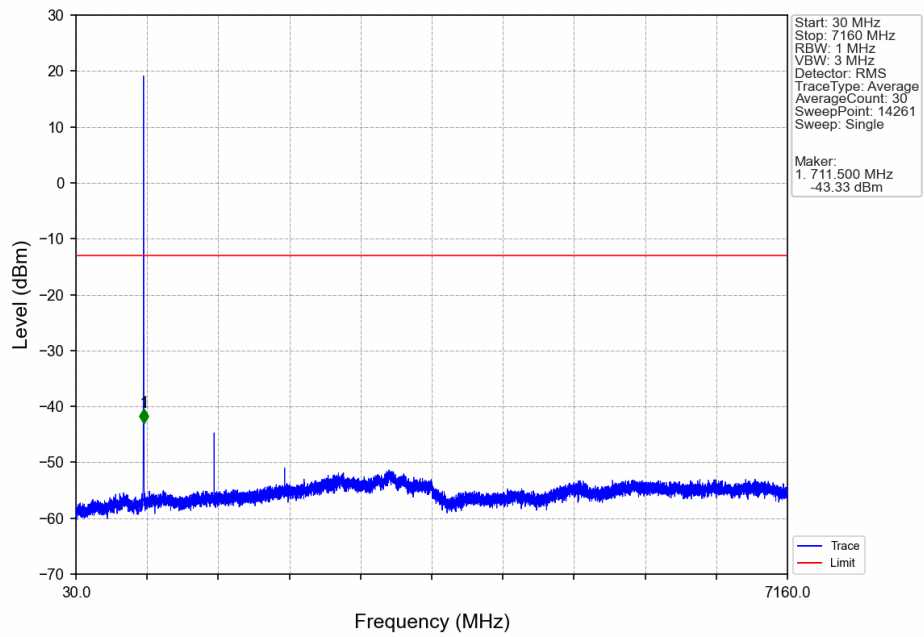


Band12 1.4MHz 16QAM LCH 699.7MHz RB 6 0 NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.844	-24.05	-13	Pass
698.9	699	0.03	/	2	698.994	-25.57	-13	Pass
699	702	0.03	/	/	/	/	/	/

Band12 1.4MHz 16QAM MCH 707.5MHz RB 1 0 NTNV



Band12 1.4MHz 16QAM HCH 715.3MHz RB 1 0 NTNV

